

# Results of Proficiency Test Organotin Compounds in Textile December 2022

Organized by: Institute for Interlaboratory Studies

Spijkenisse, the Netherlands

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Report: iis22T14

March 2023

# **CONTENTS**

1	INTRODUCTION	3
2	SET UP	. 3
2.1	QUALITY SYSTEM	. 3
2.2	PROTOCOL	. 3
2.3	CONFIDENTIALITY STATEMENT	. 4
2.4	SAMPLES	. 4
2.5	ANALYZES	. 5
3	RESULTS	6
3.1	STATISTICS	6
3.2	GRAPHICS	. 7
3.3	Z-SCORES	. 7
4	EVALUATION	. 8
4.1	EVALUATION PER SAMPLE AND PER COMPONENT	. 8
4.2	PERFORMANCE EVALUATION FOR THE GROUP OF LABORATORIES	. 9
4.3	COMPARISON OF THE PROFICIENCY TEST OF DECEMBER 2022 WITH PREVIOUS PTS	10
4.4	EVALUATION OF ANALYTICAL DETAILS	11
5	DISCUSSION	11
6	CONCLUSION	12
Арре	ndices:	
1.	Data, statistical and graphic results	
2.	Determination of other Organotin Compounds	
3.	Analytical Details	
4. -	Number of participants per country	
5.	Abbreviations and literature	30

#### 1 Introduction

Many countries have adopted environmental standards and requirements restricting the use of harmful chemicals in the production of textiles and clothing. Laws and regulations impose some of these standards and requirements. In addition to mandatory environmental standards and requirements for textile there are some Ecolabelling schemes imposing environmental requirements for textile products on a voluntary basis. Well known organizations are for instance: Bluesign® (Germany), which has created a Bluesign® restricted substances list (RSL) and OEKO-TEX® Standard 100 (Switzerland).

Since 2016 the Institute for Interlaboratory Studies (iis) organizes a proficiency scheme for the determination of Organotin Compounds in Textile every year. During the annual proficiency testing program of 2022/2023 it was decided to continue the proficiency test for the determination of Organotin Compounds in Textile.

In this interlaboratory study 85 laboratories in 26 countries registered for participation, see appendix 4 for the number of participants per country. In this report the results of the Organotin Compounds in Textile 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 two different textile samples of approximately 3 grams each, both positive on some Organotin compounds, labelled #22810 and #22811 respectively. The participants were requested to report rounded and unrounded test results. The unrounded test results were preferably used for statistical evaluation.

## 2.1 QUALITY SYSTEM

The Institute for Interlaboratory Studies in Spijkenisse, the Netherlands, has implemented a quality system based on ISO/IEC17043:2010. 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 gray cotton textile positive on Dioctyltin (DOT) was selected. The batch was cut into small pieces. After homogenization 100 small plastic bags were filled with approximately 3 grams each and labelled #22810.

The homogeneity of the subsamples was checked by determination of Dioctyltin (DOT) in accordance with ISO17353 on 8 stratified randomly selected subsamples.

	Dioctyltin (DOT) in mg/kg
sample #22810-1	11.66
sample #22810-2	12.59
sample #22810-3	12.65
sample #22810-4	13.16
sample #22810-5	13.17
sample #22810-6	12.82
sample #22810-7	11.13
sample #22810-8	12.65

Table 1: homogeneity test results of subsamples #22810

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

	Dioctyltin (DOT) in mg/kg
r (observed)	2.01
reference test method	ISO/TS16179:12
0.3 x R (reference test method)	2.41

Table 2: evaluation of the repeatability of subsamples #22810

The calculated repeatability is in agreement with 0.3 times the reproducibility of the reference test method. Therefore, homogeneity of the subsamples was assumed.

For the second sample a batch of purple cotton textile positive on Tributyltin (TBT) was selected. The batch was cut into small pieces. After homogenization 100 small plastic bags were filled with approximately 3 grams each and labelled #22811.

The homogeneity of the subsamples was checked by determination of Tributyltin (TBT) in accordance with ISO17353 on 8 stratified randomly selected subsamples.

	Tributyltin (TBT) in mg/kg
sample #22811-1	5.97
sample #22811-2	6.30
sample #22811-3	6.83
sample #22811-4	6.30
sample #22811-5	6.75
sample #22811-6	6.64
sample #22811-7	6.31
sample #22811-8	6.49

Table 3: homogeneity test results of subsamples #22811

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

	Tributyltin (TBT) in mg/kg
r (observed)	0.80
reference test method	ISO/TS16179:12
0.3 x R (reference test method)	1.25

Table 4: evaluation of the repeatability of subsamples #22811

The calculated repeatability is in agreement with 0.3 times the reproducibility of the reference test method. Therefore, homogeneity of the subsamples was assumed.

To each of the participating laboratories one sample labelled #22810 and one sample labelled #22811 were sent on November 9, 2022.

#### 2.5 ANALYZES

The participants were requested to determine on both samples: Monomethyltin (MMT), Dimethyltin (DMT), Trimethyltin (TMT), Tripropyltin (TPT), Monobutyltin (MBT), Dibutyltin (DBT), Tributyltin (TBT), Tetrabutyltin (TeBT), Monooctyltin (MOT), Dioctyltin (DOT), Trioctyltin (TOT), Diphenyltin (DPhT), Triphenyltin (TPhT) and Tricyclohexyltin (TCyHT). It was also requested to report if the laboratory was accredited for the requested components that were determined and to report some analytical details.

It was explicitly requested to treat the samples as if they were routine samples and to report the test results using the indicated units on the report form and not to round the test results, but report as much significant figures as possible. It was also requested not to report 'less than' test results which are above the detection limit, because such test results cannot 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 determination in appendices 1 and 2 of this report. The laboratories are presented by their code numbers.

Directly after the deadline, a reminder was sent to those laboratories that had not reported test results at that moment. Shortly after the deadline, the available test results were screened for suspect data. A test result was called suspect in case the Huber Elimination Rule (a robust outlier test) found it to be an outlier. The laboratories that produced these suspect data were asked to check the reported test results (no reanalyzes). Additional or corrected test results are used for data analysis and the original test results are placed under 'Remarks' in the result tables in appendices 1 and 2. Test results that came in after the deadline were not taken into account in this screening for suspect data and thus these participants were not requested for checks.

#### 3.1 STATISTICS

The protocol followed in the organization of this proficiency test was the one as described for proficiency testing in the report 'iis Interlaboratory Studies: Protocol for the Organisation, Statistics and Evaluation' of June 2018 (iis-protocol, version 3.5).

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

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

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

According to ISO13528 all (original received or corrected) results per determination were submitted to outlier tests. In the iis procedure for proficiency tests, outliers are detected prior to calculation of the mean, standard deviation and reproducibility. For small data sets, Dixon (up to 20 test results) or Grubbs (up to 40 test results) outlier tests can be used. For larger data sets (above 20 test results) Rosner's outlier test can be used. Outliers are marked by D(0.01) for the Dixon's test, by G(0.01) or DG(0.01) for the Grubbs' test and by F(0.01) for the Rosner's test. Stragglers are marked by F(0.01) for the Dixon's test, by F(0.01) for the Rosner's test. Both outliers and stragglers were not included in the calculations of averages and standard deviations.

For each assigned value the uncertainty was determined in accordance with ISO13528. Subsequently the calculated uncertainty was evaluated against the respective requirement based on the target reproducibility in accordance with ISO13528. In this PT, the criterion of ISO13528, paragraph 9.2.1. was met for all evaluated tests, therefore, the uncertainty of all assigned values may be negligible and need not be included in the PT report.

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

#### 3.2 GRAPHICS

In order to visualize the data against the reproducibilities from literature, Gauss plots were made, using the sorted data for one determination (see appendix 1). On the Y-axis the reported test results are plotted. The corresponding laboratory numbers are on the X-axis. The straight horizontal line presents the consensus value (a trimmed mean). The four striped lines, parallel to the consensus value line, are the +3s, +2s, -2s and -3s target reproducibility limits of the selected reference test method. Outliers and other data, which were excluded from the calculations, are represented as a cross. Accepted data are represented as a triangle.

Furthermore, Kernel Density Graphs were made. This is a method for producing a smooth density approximation to a set of data that avoids some problems associated with histograms. Also, a normal Gauss curve (dotted line) was projected over the Kernel Density Graph (smooth line) for reference. The Gauss curve is calculated from the consensus value and the corresponding standard deviation.

# 3.3 Z-SCORES

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

The target standard deviation was calculated from the literature reproducibility by division with 2.8. In case no literature reproducibility was available, other target values were used, like Horwitz or an estimated reproducibility based on former iis proficiency tests.

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

The z-scores were calculated according to:

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

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

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

```
|z| < 1 good
1 < |z| < 2 satisfactory
2 < |z| < 3 questionable
3 < |z| unsatisfactory
```

#### 4 EVALUATION

In this proficiency test some problems were encountered with the dispatch of the samples. Seven participants reported test results after the final reporting date and five other participants did not report any test results. Not all participants were able to report all components requested.

In total 80 participants reported 334 numerical test results. Observed were 15 outlying test results, which is 4.5%. In proficiency tests outlier percentages of 3% - 7.5% are quite normal.

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

### 4.1 EVALUATION PER SAMPLE AND PER COMPONENT

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

For the determination of Organotin compounds in textile test method ISO/TS16179 is the most used test method. Unfortunately, test method ISO/TS16179 mentions for only three Organotin components precision data that varies greatly from one another (see table B.1 of ISO/TS16179:12) with MBT having an RSD of 23%. Therefore, we decided that in iis PTs on Organotin in Textile to compare all Organotin compounds with a target value of 23% for the evaluation of the test results. This means that the target reproducibility for each Organotin component will be 2.8 \* 23 \* mean PT / 100.

# sample #22810

- Monooctyltin (MOT): This determination was not problematic. Two statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the requirements of ISO/TS16179:12.
- <u>Dioctyltin (DOT)</u>: This determination was not problematic. Two statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the requirements of ISO/TS16179:12.

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

## sample #22811

- Monobutyltin (MBT): This determination was not problematic. Two statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the requirements of ISO/TS16179:12.
- <u>Dibutyltin (DBT)</u>: This determination was problematic. Five statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is not in agreement with the requirements of ISO/TS16179:12.
- <u>Tributyltin (TBT)</u>: This determination was not problematic. Four statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the requirements of ISO/TS16179:12.

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

# 4.2 PERFORMANCE EVALUATION FOR THE GROUP OF LABORATORIES

A comparison has been made between the reproducibility as declared by the reference 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 \* standard deviation) and the target reproducibility derived from reference method are presented in the next tables.

Component	unit	n	average	2.8 * sd	R(lit)
Monooctyltin (MOT)	mg/kg	70	1.12	0.72	0.72
Dioctyltin (DOT)	mg/kg	77	12.0	5.3	7.7

Table 5: reproducibilities of tests on sample #22810

Component	unit	n	average	2.8 * sd	R(lit)
Monobutyltin (MBT)	mg/kg	43	0.15	0.10	0.10
Dibutyltin (DBT)	mg/kg	54	0.20	0.15	0.13
Tributyltin (TBT)	mg/kg	75	2.51	1.63	1.62

Table 6: reproducibilities of tests on sample #22811

Without further statistical calculations it can be concluded that for many components there is a good compliance of the group of participants with the reference test methods. The problematic tests have been discussed in paragraph 4.1.

## 4.3 COMPARISON OF THE PROFICIENCY TEST OF DECEMBER 2022 WITH PREVIOUS PTS

	December 2022	December 2021	December 2020	December 2019	December 2018
Number of reporting laboratories	80	72	85	85	100
Number of test results	334	185	247	317	415
Number of statistical outliers	15	11	12	12	7
Percentage of statistical outliers	4.5%	5.9%	4.9%	3.8%	1.7%

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 to uncertainties observed in PTs over the years, expressed as relative standard deviation (RSD) of the PTs, see next table.

Component	December 2022	December 2021	December 2020	December 2019	2018 – 2016	Reference ISO16179
Monomethyltin (MMT)		34%		37%		23%
Dimethyltin (DMT)		23%		22%	25-40%	23%
Trimethyltin (TMT)				26%		23%
Monobutyltin (MBT)	22%	22%	20-39%	33%	37%	23%
Dibutyltin (DBT)	26%		18%	22%	21-35%	23%
Tributyltin (TBT)	23%				29-31%	23%
Monooctyltin (MOT)	23%					23%
Dioctyltin (DOT)	16%					23%

Table 8: development of uncertainties of the proficiency tests over the years

The RSDs observed in this PT are in line with RSDs observed in previous iis PTs except for DOT, which is remarkably small.

#### 4.4 EVALUATION OF ANALYTICAL DETAILS

The participants were asked to provide some analytical details which are listed in appendix 3. Based on the reported answers the following can be summarized:

- About 90% of the participants mentioned that they are ISO/IEC17025 accredited to determine the reported components.
- About 35% of the participants indicate to have used the samples as received and 65% of the participants further cut or further grinded the samples prior to analysis.
- About 60% of the participants used 1 gram as sample intake. About 35% around 0.5 grams and 5% around 2 or more grams.
- About 90% used Ultrasonic technique to extract/release the components from the samples.
- About 85% used Methanol or a mixture of Methanol and Ethanol as extraction solvent.
- Almost all participants used an extraction/release time of 60 minutes and an extraction/release temperature of between 50 and 70 °C.
- About 90% reported to observe a pH of 4.5 4.6. About 55% have adjusted the pH.

No further statistical analysis has been performed with respect to the analytical details because most of the calculated reproducibilities are in agreement with the requirements of the target reproducibility.

#### 5 DISCUSSION

In this PT the average of the homogeneity test results are not in line with the average (consensus value) from the PT results. There are several reasons for this. First, the goal of the homogeneity testing is very different from the goal of the evaluation of the reported PT results. In order to prove the homogeneity of the PT samples, a test method is selected with a high precision (smallest variation). The accuracy (trueness) of the test method is less relevant.

Secondly, the homogeneity testing is done by one laboratory only. The test results of this (ISO/IEC 17025 accredited) laboratory will have a bias (systematic deviation) depending on the test method used. The desire to detect small variations between the PT samples leads to the use of a sensitive test method with high precision, which may be a test method with significant bias.

Also, each test result reported by the laboratories that participate in the PT will have a bias. However, some will have a positive bias and others a negative bias. These different biases compensate each other in the PT average (consensus value). Therefore, the PT consensus value may deviate from the average of the homogeneity test. At the same time the accuracy of the PT consensus value is more reliable than the accuracy of the average of the results of the homogeneity test.

When the test results of this interlaboratory study were compared to the OEKO-TEX® Standard 100 (table 9) it should be noted that some laboratories would have made a different decision about the acceptability or rejection of the textile.

For sample #22810 and based on MOT test results two participants would have rejected the sample for all classes and all other participants would have accepted the sample for all classes.

For sample #22810 and based on DOT test results one participant would have rejected the sample for all classes and all other participants would have accepted the sample for all classes.

For sample #22811 and based on MBT test results all participants would have accepted the sample for all classes.

For sample #22811 and based on DBT test results two participants would have rejected the sample for all classes and all other participants would have accepted the sample for all classes.

For sample #22811 and based on TBT test results three participants would have accepted the sample for classes 2, 3 and 4 and two of these three would also have accepted the sample for class 1. All other participants would have rejected the sample for all classes.

	Class 1 Baby clothes in mg/kg	Class 2 Clothes direct skin contact in mg/kg	Class 3 Clothes, no direct contact in mg/kg	Class 4 Decoration material in mg/kg
TBT, TPhT	0.5	1.0	1.0	1.0
Other Organotin compounds	1.0	2.0	2.0	2.0

Table 9: OEKO-TEX® Standard 100 criteria for Organotin in textiles in EU

#### 6 CONCLUSION

In this proficiency test for the determination of Organotin Compounds in Textile it was noticed that the majority of the participants was able to detect and quantify the Organotin components Monooctyltin (MOT) and Dioctyltin (DOT) in sample #22810 and Monobutyltin (MBT), Dibutyltin (DBT) and Tributyltin (TBT) in sample #22811.

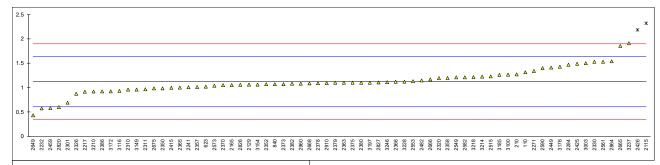
Each participating laboratory will have to evaluate its performance in this study and decide about any corrective actions if necessary. Therefore, participation on a regular basis in this scheme could be helpful to improve the performance and the quality of the analytical results.

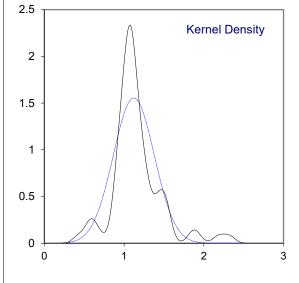
# **APPENDIX 1**

Determination of Monooctyltin (MOT) on sample #22810; results in mg/kg

Detern		octyltin (MOT) or	n sample i	_	
lab	method	value	mark	z(targ)	remarks
110	ISO/TS 16179	1.315		0.74	
210	In house	1.27		0.57	
551					
623	ISO/TS 16179	1.020		-0.40	
840	ISO22744	1.07	0.5(0.04)	-0.20	
2115	In house	2.32	C,R(0.01)	4.64	First reported 3.782
2129	ISO/TS 16179	1.06		-0.24	
2165	ISO/TS 16179	1.053		-0.27	
2217	ISO/TS 16179	0.916		-0.80	
2232	ISO/TS 16179	0.572		-2.13	
2241	ISO/TS 16179	1.006		-0.45	
2247	ISO/TS 16179	Not detected			
2265	100/T0 40470	4.04		0.04	
2271	ISO/TS 16179	1.34		0.84	
2284	ISO/TS 16179	1.468	C	1.34	Donaibly a false negative test result. First reported a d
2300 2301	ISO/TS 16179 ISO/TS 16179	<0.2 0.69	С	<-3.57 -1.68	Possibly a false negative test result. First reported n.d.
2310	ISO22744-1	0.96		-0.63	
2310	ISO22744-1	0.96556		-0.63	
2320	ISO22744-1	1.195		0.28	
2326	ISO22744-1	0.873		-0.97	
2330	ISO/TS 16179	1.530		1.58	
2350	ISO/TS 16179	0.984		-0.54	
2352	GB/T20385.1	1.070		-0.20	
2357	ISO/TS 16179	1.011		-0.43	
2358	100/10 101/0	1.196		0.28	
2363		1.1		-0.09	
2365	ISO/TS 16179	1.00		-0.48	
2366	ISO/TS 16179	1.12		-0.01	
2370	ISO22744-1	1.05		-0.28	
2373	ISO17353	1.07		-0.20	
2375	ISO22744-1	1.1		-0.09	
2378	ISO22744-1	1.09		-0.13	
2379	ISO/TS 16179	1.0993		-0.09	
2380	ISO/TS 16179	1.1		-0.09	
2382	ISO22744-1	1.08		-0.17	
2386	ISO/TS 16179	0.921		-0.78	
2415	ISO/TS 16179	0.995		-0.49	
2425	In house	1.49		1.42	
2426	ISO/TS 16179	2.185	R(0.01)	4.11	
2449	ISO/TS 16179	1.410		1.11	
2453	100/70 10170				
2459	ISO/TS 16179	0.58		-2.10	
2482	ISO/TS 16179	1.147		0.09	
2515	ISO16179Mod.	1.230		0.42	
2522 2525	ISO/TS 16179	<0.1	<u></u>	<-3.96	Describly a folia pagative test result. First reported a d
	ISO/TS 16179		С		Possibly a false negative test result. First reported n.d.
2549 2553	130/13 101/9	1.21 1.13		0.34 0.03	
2561	ISO22744-1	1.53		1.58	
2569	10022744-1	1.55			
2573	ISO/TS 16179	1.04		-0.32	
2582	In house	1.2100		0.34	
2590	ISO/TS 16179	1.4	С	1.07	First reported 0.57
2591	- · · · · · · · · ·		-		1
2649	In house	0.43		-2.68	
2665	In house	1.8541		2.83	
2666	ISO/TS 16179	1.168	С	0.17	First reported 1.944
2668	ISO/TS 16179	1.085		-0.15	·
2675	In house	0.9830		-0.54	
2678					
2743					
2820	ISO/TS 16179	0.6		-2.02	
2826	ISO/TS 16179	1.057		-0.25	
2827	In house	1.104		-0.07	
2864	ISO/TS 16179	1.54		1.62	
2910	ISO/TS 16179	1.093		-0.12	
2960	ISO/TS 16179	1.08		-0.17	
2977	ICO/TC 40470	 4 F		4.40	
3003	ISO/TS 16179	1.5		1.46	
3100	ISO/TS 16179	1.266		0.55	
3116 3149	ISO/TS 16179 ISO22744-1	0.932 0.96		-0.74 -0.63	
3149	ISO/ZZ/44-1 ISO/TS 16179	1.06		-0.63 -0.24	
J 1 J4	100/10 101/8	1.00		-0.24	

lab	method	value	mark	z(targ)	remarks
3172	ISO/TS 16179	0.9226		-0.78	
3176	In house	1.43		1.19	
3185	ISO/TS 16179	1.262		0.54	
3197	ISO/TS 16179	1.1		-0.09	
3210		0.92		-0.79	
3214	ISO/TS 16179	1.225		0.40	
3218	ISO/TS 16179	1.216		0.36	
3228	ISO/TS 16179	1.121		-0.01	
3230					
3237		1.91		3.05	
3246	ISO/TS 16179	1.112		-0.04	
	normality	suspect			
	n	70			
	outliers	2			
	mean (n)	1.1228			
	st.dev. (n)	0.25678	RSD = 23%		
	R(calc.)	0.7190			
	st.dev.(ISO/TS16179:12)	0.25825			
	R(ISO/TS16179:12)	0.7231			

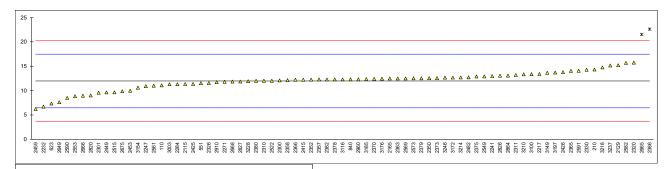


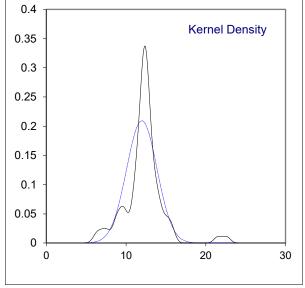


# Determination of Dioctyltin (DOT) on sample #22810; results in mg/kg

	lah	moth od	value	manula.	=/towa\	wa wa wika
210 In house	lab	method	value	mark	z(targ)	remarks
551   ISO/TS 16179   11.5173   -0.17   221   ISO/TS 16179   7.349   -1.68   840   ISO/22744   12.31   -0.12   2161   ISO/TS 16179   12.49   -0.19   2161   ISO/TS 16179   12.49   -0.52   2171   ISO/TS 16179   12.49   -0.52   2232   ISO/TS 16179   12.986   -0.37   2241   ISO/TS 16179   10.904   -0.39   2241   ISO/TS 16179   11.306   -0.49   2242   ISO/TS 16179   11.306   -0.49   2243   ISO/TS 16179   11.306   -0.40   2244   ISO/TS 16179   11.306   -0.40   2244   ISO/TS 16179   12.90   -0.40   2251   ISO/TS 16179   12.90   -0.40   2261   ISO/TS 16179   12.90   -0.40   2261   ISO/TS 16179   12.90   -0.40   2271   ISO/TS 16179   12.90   -0.40   2271   ISO/TS 16179   12.90   -0.40   2280   ISO/TS 16179   12.90   -0.15   2290   ISO/TS 16179   12.20   -0.15   2290   ISO/TS 16179   14.283   -0.84   2290   ISO/TS 16179   12.236   -0.15   2390   ISO/TS 16179   12.236   -0.24   2390   ISO/TS 16179   12.236   -0.40   2300   ISO/TS 16179   12.23   -0.10   2300   ISO/TS 16179   12.23   -0.10   2300   ISO/TS 16179   12.24   -0.15   2300   ISO/TS 16179   12.25   -0.10   2300   ISO/TS 16179   12.25   -0.10   2300   ISO/TS 16179   12.26   -0.26   2300   ISO/TS 16179   12.27   -0.09   2300   ISO/TS 16179   12.28   -0.26   2300   ISO/TS 16179   12.29   -0.86   2300   ISO/TS 16179   12.20   -0.96   2300   ISO/TS 16179				C		First reported 17.07
623   SO/TS 16179   7.349   -1.68   40   SO/Z2744   12.31   0.12   2116   In house   11.34   -0.23   2127   SO/TS 16178   13.49   0.52   2128   SO/TS 16178   13.419   0.52   2129   SO/TS 16178   13.419   0.52   2212   SO/TS 16178   13.419   0.52   2221   SO/TS 16178   12.986   C				C		First reported 17.27
840   SO22744						
2119   SO/TS 16179   15.20						
2129   ISO/TS 16179   15.20   1.17   1.216   ISO/TS 16179   12.49   0.19   0.52   1.27   ISO/TS 16179   13.419   0.52   1.22   ISO/TS 16179   12.986   C   0.37   IFIST 16179   12.986   C   0.37   IFIST 16179   1.22   1.22   ISO/TS 16179   1.22   0.90   0.94   1.22   1.23   1.22   1.23   1.23   1.24   1.23   1.24						
216   SO/TS 16179   12.49   0.19   12.217   SO/TS 16179   6.706   1.91   1.222   SO/TS 16179   6.706   1.91   1.222   SO/TS 16179   6.706   1.91   1.222   SO/TS 16179   12.98   C   0.37   First reported 16.340   1.2221   SO/TS 16179   11.308   0.24   1.2211   SO/TS 16179   11.308   0.24   1.2211   SO/TS 16179   11.308   0.24   1.2211   SO/TS 16179   9.56   C   0.88   First reported 8.4   SO/TS 16179   12.536   0.20   0.10   SO/TS 16179   12.536   0.20   0.20   SO/TS 16179   12.536   0.20   0.10   SO/TS 16179   12.536   0.20   0.10   SO/TS 16179   12.536   0.20   0.10   SO/TS 16179   12.50   0.10   SO/TS 16179   12.50   0.19   SO/TS 16179   12.50   0.79   SO/TS 16179   12.50   0.20						
2217   SO/TS 16179   13.419						
2232   ISO/TS 16179   6,706						
2241   ISO/TS 16179   12.986						
2247   ISO/TS 16179				С		First reported 16 340
2271 ISO/TS 16179 11.306				Ü		Thorroportou Toto To
2271   ISO/TS 16179						
2284   ISOTS 16179   11.306		ISO/TS 16179				
2300   ISO/TS 16179   12.09						
2301   ISO/TS 16179   9.56   C						
2311   SO22744-1   12.01   0.01   2321   SO22744-1   15.737   1.37   2326   SO22744-1   11.564   0.015   2336   SO22744-1   11.564   0.015   2330   SOTTS 16179   12.236   0.20   2352   GB/T20385.1   12.260   0.10   2352   GB/T20385.1   12.260   0.11   2358   12.133   0.06   2357   SOTTS 16179   12.290   0.11   2358   12.133   0.06   2368   SO/TS 16179   14.05   0.75   2369   SO/TS 16179   12.22   0.09   2370   SO22744-1   12.4   0.15   2371   SO22744-1   12.8   0.34   2373   SO/TS 16179   12.28   0.21   2374   SO/TS 16179   12.28   0.34   2379   SO/TS 16179   12.29   0.01   2380   SO/TS 16179   12.29   0.01   2380   SO/TS 16179   12.29   0.01   2381   SO22744-1   12.9   0.01   2382   SO22744-1   12.9   0.01   2384   SO22744-1   12.9   0.01   2385   SO22744-1   12.9   0.01   2386   SO/TS 16179   12.21   0.09   2425   In house   11.56   0.22   2426   SO/TS 16179   9.621   0.05   2425   SO/TS 16179   9.621   0.05   2426   SO/TS 16179   9.621   0.05   2426   SO/TS 16179   9.621   0.05   2427   SO/TS 16179   12.72   0.07   2428   SO/TS 16179   12.72   0.07   2429   SO/TS 16179   12.50   0.01   2525   SO/TS 16179   12.50   0.01   2525   SO/TS 16179   12.50   0.01   2525   SO/TS 16179   12.50   0.01   2526   SO/TS 16179   12.50   0.01   2527   SO/TS 16179   12.50   0.01   2528   SO/TS 16179   12.50   0.01   2529   SO/TS 16179   12.50   0.01   2520   SO/TS 16179   12.50   0.01   2521   SO/TS 16179   12.50   0.01   2522   SO/TS 16179   12.50   0.01   2523   SO/TS 16179   12.50   0.01   2524   SO/TS 16179   12.50   0.01   2525   SO/TS 16179   13.50   0.00   2526   SO/TS 16179   13.60   0.00   2527   In house   15.6893   1.35   2528   SO/TS 16179   13.50   0.00   2529   SO/TS 16179   13.50   0.00   2520   SO/TS 16179   13.50   0.00   2521   SO/TS 16179   13.50   0.00   2522   SO/TS 16179   13.50   0.00   2523   SO/TS 16179   13.50   0.00   2524   SO/TS 16179   13.50   0.00   2525   SO/TS 16179   13.50   0.00   2526   SO/TS 16179   13.50   0.00   2527   In house   15.666   0.00   2528   SO/TS 16179   13.560   0.00   2529				С		First reported 8.4
2311   SO22744-1   13.211   0.45   2320   SO22744-1   11.564   -0.15   2330   SOTS 16179   14.283   0.84   2350   SOTS 16179   12.286   0.20   2352   GB72385.1   12.260   0.10   2352   GB72385.1   12.260   0.10   2353   SOTS 16179   12.290   0.11   2358   12.133   0.06   2368   SOTS 16179   14.05   0.75   2366   SOTS 16179   14.05   0.75   2366   SOTS 16179   12.2   0.09   2370   SO22744-1   12.4   0.15   2373   SO22744-1   12.9   0.34   2374   SO22744-1   12.9   0.34   2375   SO22744-1   12.9   0.34   2376   SO22744-1   12.9   0.11   2380   SOTS 16179   12.0   0.01   2380   SOTS 16179   12.0   0.01   2380   SOSTS 16179   12.0   0.01   2380   SOZ75   SO2744-1   12.29   0.11   2382   SO22744-1   12.29   0.11   2382   SO22744-1   12.29   0.11   2384   SO2744-1   12.29   0.11   2386   SOTS 16179   12.20   0.01   2425   In house   11.36   0.22   2426   SOTS 16179   9.621   0.86   2426   SOTS 16179   12.0   0.01   2426   SOTS 16179   12.0   0.01   2427   SOTS 16179   12.2   0.27   2428   SOTS 16179   12.2   0.27   2439   SOTS 16179   12.2   0.27   2441   SOTS 16179   12.2   0.27   2451   SOTS 16179   12.2   0.27   2513   SOTS 16179   12.2   0.34   2669   SOTS 16179   12.5   0.34   2669   SOTS 16179   12.5   0.34   2660   SOTS 16179   12.5   0.34   2660   SOTS 16179   12.5   0.34   2660   SOTS 16179   13.60   0.05   2670   SOTS 16179   13.60   0.05   2680   SOTS 16179   13.60   0.40   2680   SOTS 16179   13.04   0.05   2680   SOTS 16179   13.04   0.05   2680   SOTS 16179   13.08   0.40   2690   SOTS 16179   13.360   0.40   2600   SOTS 16179   13.360   0.40   2600   SOTS 16179   13.360   0.40   2601   SOTS 16179   13.360   0.40   2602   SOTS 16179   13.360   0.40   2604   SOTS 16179   13.360   0.40   2606   SOTS 16179   13.360   0.50   2607   SOTS 16179   13.360   0.50   2608   SOTS 16179   13.360   0.50   2609   SOTS 16179   13.360   0.50   2610						'
2326   SOC2744-1   11.564   -0.15   2336   SOC75 16179   14.283   0.84   2350   SOCTS 16179   12.536   0.20   2352   GB.T20385.1   12.60   0.10   2358   12.133   0.06   2363   SOCTS 16179   14.05   0.75   2366   SOCTS 16179   14.05   0.75   2366   SOCTS 16179   14.05   0.75   2366   SOCTS 16179   12.22   0.09   2370   SOC2744-1   12.4   0.15   2371   SOC2744-1   12.9   0.34   2373   SOC2744-1   12.9   0.34   2376   SOC2744-1   12.3   0.12   2377   SOC2744-1   12.3   0.12   2378   SOC2744-1   12.3   0.12   2379   SOCTS 16179   12.0   0.01   2380   SOCTS 16179   12.0   0.01   2380   SOCTS 16179   12.221   0.09   2425   In house   11.36   0.022   2426   SOCTS 16179   9.621   0.85   2426   SOCTS 16179   9.621   0.85   2427   SOCTS 16179   9.621   0.85   2428   SOCTS 16179   9.621   0.85   2429   SOCTS 16179   12.72   0.27   2429   SOCTS 16179   12.72   0.27   2429   SOCTS 16179   12.20   0.75   2429   SOCTS 16179   12.21   0.01   2520   SOCTS 16179   12.22   0.27   2429   SOCTS 16179   12.21   0.01   2520   SOCTS 16179   12.21   0.01   2520   SOCTS 16179   12.01   0.01   2520   SOCTS 16179   12.01   0.01   2521   SOCTS 16179   12.01   0.01   2522   SOCTS 16179   12.01   0.01   2524   SOCTS 16179   12.01   0.01   2525   SOCTS 16179   12.01   0.01   2526   SOCTS 16179   12.50   0.34   2527   SOCTS 16179   12.50   0.34   2528   In house   1.6893   1.35   2590   SOCTS 16179   12.50   0.20   2520   SOCTS 16179   12.50   0.20   2521   SOCTS 16179   12.50   0.30   2522   SOCTS 16179   12.50   0.00   2523   SOCTS 16179   12.50   0.00   2524   In house   1.6893   1.35   2526   SOCTS 16179   1.30   0.00   2527   In house   1.686   0.00   2528   In house   1.6893   1.35   2530   SOCTS 16179   13.360   0.40   2520   SOCTS 16179   13.360   0.40   2521   SOCTS 16179   13.360   0.40   2522   SOCTS 16179   13.360   0.40   2523   SOCTS 16179   13.360   0.40   2524   SOCTS 16179   13.360   0.40   2525   SOCTS 16179   13.360   0.40   2526   SOCTS 16179   13.360   0.40   2527   In house   1.666   0.00   2528   SOCTS 16179   13.360   0						
2326   ISO/22744-1   11.564   -0.15						
2330 ISO/TS 16179 14.283 0.84 2350 ISO/TS 16179 12.536 0.20 2352 GBT20385.1 12.260 0.10 2358 12.57 ISO/TS 16179 12.290 0.11 2358 12.55 0.19 2365 ISO/TS 16179 14.05 0.75 2366 ISO/TS 16179 14.05 0.75 2366 ISO/TS 16179 12.22 0.09 2370 ISO22744-1 12.4 0.15 2373 ISO/2744-1 12.9 0.34 2378 ISO22744-1 12.3 0.12 2379 ISO/TS 16179 12.5260 0.20 2380 ISO/TS 16179 12.5260 0.20 2380 ISO/TS 16179 12.0 0.01 2382 ISO/ZS 16179 12.0 0.01 2383 ISO/TS 16179 12.21 0.09 2426 IN house 11.36 0.02 2426 ISO/TS 16179 9.621 0.05 2429 ISO/TS 16179 12.72 0.27 2439 ISO/TS 16179 12.70 0.65 2449 ISO/TS 16179 12.70 0.65 2452 ISO/TS 16179 0.23 0.05 2452 ISO/TS 16179 12.70 0.73 2453 9.967 0.73 2459 ISO/TS 16179 12.70 0.65 2459 ISO/TS 16179 12.70 0.65 2522 ISO/TS 16179 12.70 0.65 2525 ISO/TS 16179 12.70 0.95 2525 ISO/TS 16179 12.70 0.95 2526 ISO/TS 16179 12.70 0.95 2527 ISO/TS 16179 12.70 0.95 2528 ISO/TS 16179 12.70 0.95 2529 ISO/TS 16179 12.0 0.01 2529 ISO/TS 16179 12.0 0.01 2520 ISO/TS 16179 12.0 0.01 2521 ISO/TS 16179 12.0 0.01 2522 ISO/TS 16179 12.0 0.01 2523 ISO/TS 16179 12.0 0.01 2524 ISO/TS 16179 12.0 0.01 2525 ISO/TS 16179 12.0 0.01 2526 ISO/TS 16179 12.0 0.01 2527 ISO/TS 16179 12.0 0.01 2528 ISO/TS 16179 12.5 0.09 2529 ISO/TS 16179 12.5 0.09 2520 ISO/TS 16179 12.5 0.09 2521 ISO/TS 16179 12.5 0.09 2522 ISO/TS 16179 12.5 0.00 2523 ISO/TS 16179 12.5 0.00 2524 ISO/TS 16179 12.5 0.00 2526 ISO/TS 16179 13.00 0.00 2527 Iso/TS 16179 13.00 0.00 2528 Iso/TS 16179 13.00 0.00 2529 ISO/TS 16179 13.00 0.00 2520 ISO/TS 16179 13.00 0.00 2521 ISO/TS 16179 13.00 0.00 2522 ISO/TS 16179 13.00 0.00 2523 ISO/TS 16179 13.00 0.00 2524 ISO/TS 16179 13.00 0.00 2525 ISO/TS 16179 13.00 0.00 2526 ISO/TS 16179 13.00 0.00 2527 Iso						
2850 ISO/TS 16179 12.536 0.20 2852 GBT/20385.1 12.260 0.10 2857 ISO/TS 16179 12.290 0.11 2858 12.133 0.06 2863 12.5 0.19 2866 ISO/TS 16179 14.05 0.75 2866 ISO/TS 16179 12.22 0.09 2870 ISO/Z744-1 12.4 0.15 2873 ISO/Z744-1 12.9 0.34 2878 ISO/Z744-1 12.9 0.34 2878 ISO/Z744-1 12.9 0.14 2878 ISO/Z744-1 12.9 0.11 2886 ISO/TS 16179 12.5260 0.20 2890 ISO/TS 16179 12.0 0.01 2890 ISO/TS 16179 12.0 0.01 2890 ISO/TS 16179 12.21 0.09 2402 In house 11.36 0.22 2426 ISO/TS 16179 12.77 0.65 2449 ISO/TS 16179 0.623 0.20 2489 ISO/TS 16179 0.623 0.20 2489 ISO/TS 16179 0.623 0.20 2490 ISO/TS 16179 0.643 0.85 2522 ISO/TS 16179 0.01 C 0.3 2523 ISO/TS 16179 12.72 0.37 2524 ISO/TS 16179 12.5 0.99 2525 ISO/TS 16179 12.5 0.99 2526 ISO/TS 16179 12.5 0.99 2527 ISO/TS 16179 12.5 0.99 2528 ISO/TS 16179 12.5 0.99 2529 ISO/TS 16179 12.5 0.99 2520 ISO/TS 16179 12.5 0.99 2521 ISO/TS 16179 12.5 0.99 2522 ISO/TS 16179 12.5 0.99 2523 ISO/TS 16179 12.5 0.99 2524 ISO/TS 16179 12.5 0.99 2525 ISO/TS 16179 12.5 0.99 2526 Is ISO/TS 16179 12.5 0.99 2527 ISO/TS 16179 12.5 0.99 2528 ISO/TS 16179 12.5 0.99 2529 ISO/TS 16179 12.5 0.99 2520 ISO/TS 16179 12.5 0.99 2521 In house 11.86 2522 ISO/TS 16179 12.5 0.99 2523 ISO/TS 16179 12.5 0.99 2524 ISO/TS 16179 12.5 0.99 2525 ISO/TS 16179 12.5 0.99 2526 Is ISO/TS 16179 12.5 0.99 2527 IsO/TS 16179 12.5 0.99 2528 ISO/TS 16179 12.5 0.99 2529 ISO/TS 16179 12.5 0.99 2530 ISO/TS 16179 13.360 2530 ISO/TS 16179 13.360 2540 ISO/TS 16179						
2855   GBIT20385.1   12.280   0.10   2858   12.133   0.06   2857   SDOTS 16179   12.290   0.11   2858   12.133   0.06   2865   SDOTS 16179   14.05   0.75   2866   SDOTS 16179   12.22   0.09   2870   SDOZ2744-1   12.4   0.15   2873   SDOZ2744-1   12.9   0.34   2873   SDOZ2744-1   12.9   0.34   2878   SDOZ78 16179   12.560   0.20   2880   SDOTS 16179   12.260   0.20   2880   SDOTS 16179   12.29   0.11   2880   SDOTS 16179   12.29   0.11   2880   SDOTS 16179   22.6   R(0.01)   3.86   280   SDOTS 16179   22.6   R(0.01)   3.86   2465   SDOTS 16179   9.621   0.05   2446   SDOTS 16179   9.621   0.05   2450   SDOTS 16179   12.72   0.27   2515   SDOTS 16179   12.72   0.27   2515   SDOTS 16179   12.01   0.01   2525   SDOTS 16179   12.01   0.01   2525   SDOTS 16179   12.92   0.34   2531   SDOTS 16179   12.50   0.91   2526   SDOTS 16179   12.50   0.91   2527   SDOTS 16179   12.50   0.91   2528   SDOTS 16179   12.50   0.91   2529   SDOTS 16179   12.50   0.91   2529   SDOTS 16179   12.50   0.91   2520   SDOTS 16179   12.50   0.91   2521   SDOTS 16179   12.50   0.91   2522   SDOTS 16179   12.50   0.91   2523   SDOTS 16179   12.50   0.91   2524   SDOTS 16179   12.50   0.91   2525   SDOTS 16179   12.50   0.91   2526   SDOTS 16179   12.50   0.91   2527   SDOTS 16179   12.50   0.91   2528   SDOTS 16179   12.50   0.90   2529   SDOTS 16179   12.50   0.90   2520   SDOTS 16179   12.50   0.90   2521   In house   16.6893   1.35   2521   SDOTS 16179   1.94   0.95   2522   SDOTS 16179   1.94   0.95   2523   SDOTS 16179   1.94   0.95   2534   SDOTS 16179   1.94   0.95   2549   SDOTS 16179   1.94   0.95   2540   SDOTS 16179   1						
2857 ISO/TS 16179   12.90						
2358   12.133   0.06   2363   12.5   0.19   2366   ISO/TS 16179   14.05   0.75   2366   ISO/TS 16179   12.22   0.09   2370   ISO/22744-1   12.4   0.15   2373   ISO/22744-1   12.9   0.34   2373   ISO/22744-1   12.9   0.34   2378   ISO/22744-1   12.9   0.44   2379   ISO/TS 16179   12.5260   0.20   2380   ISO/TS 16179   12.520   0.01   2380   ISO/TS 16179   12.20   0.01   2380   ISO/TS 16179   12.21   0.09   2425   In house   11.36   -0.22   2426   ISO/TS 16179   12.72   0.27   2515   ISO/TS 16179   12.72   0.73   2522   ISO/TS 16179   12.91   0.01   2525   ISO/TS 16179   12.91   0.01   2525   ISO/TS 16179   12.92   0.34   2531   ISO/TS 16179   12.01   0.01   2525   ISO/TS 16179   12.52   0.34   2532   ISO/TS 16179   12.52   0.34   2533   8.84   -1.14   2549   ISO/TS 16179   12.52   0.34   2559   ISO/TS 16179   12.52   0.19   2526   ISO/TS 16179   12.52   0.20   2527   ISO/TS 16179   12.52   0.20   2528   ISO/TS 16179   12.52   0.20   2529   ISO/TS 16179   12.52   0.20   2520   ISO/TS 16179   13.047   0.39   2520   ISO/TS 16179   13.360   0.40   2520   ISO/TS 16179   13.360   0.40   2520   ISO/TS 16179   13.360   0.50   2520   ISO/						
2868   SO/TS 16179						
2366 ISO/TS 16179 12 22 0.9 2370 ISO/22744-1 12.4 0.15 2373 ISO/22744-1 12.9 0.34 2373 ISO/2744-1 12.9 0.34 2378 ISO/2744-1 12.9 0.34 2379 ISO/7S 16179 12.5260 0.20 2380 ISO/TS 16179 12.5260 0.01 2380 ISO/TS 16179 12.0 0.01 2380 ISO/TS 16179 12.21 0.9 2381 ISO/2744-1 12.3 0.12 2386 ISO/TS 16179 12.0 0.01 2382 ISO/TS 16179 12.221 0.9 2425 In house 11.36 -0.22 2426 ISO/TS 16179 13.77 0.65 2439 ISO/TS 16179 13.77 0.65 2449 ISO/TS 16179 12.72 0.9 2450 ISO/TS 16179 12.72 0.9 2451 ISO/TS 16179 12.72 0.7 2452 ISO/TS 16179 12.72 0.7 2453 180/TS 16179 12.72 0.7 2454 ISO/TS 16179 12.92 0.34 2525 ISO/TS 16179 <0.1 C <4.31 2526 ISO/TS 16179 12.52 0.9 2527 ISO/TS 16179 12.52 0.9 2528 ISO/TS 16179 12.52 0.9 2529 ISO/TS 16179 12.52 0.9 2520 ISO/TS 16179 12.52 0.9 2521 ISO/TS 16179 12.52 0.9 2522 ISO/TS 16179 12.52 0.9 2523 ISO/TS 16179 12.52 0.7 2524 In house 15.6893 1.35 2529 ISO/TS 16179 12.52 0.9 2520 ISO/TS 16179 8.5 C -1.26 2521 ISO/TS 16179 8.9 2522 ISO/TS 16179 8.9 2523 ISO/TS 16179 8.9 2524 In house 7.62 1.58 2525 ISO/TS 16179 8.9 2526 ISO/TS 16179 8.9 2527 ISO/TS 16179 1.3 2528 In house 14.067 0.76 2539 In house 11.866 -0.04 2549 In house 7.62 1.58 2540 ISO/TS 16179 13.047 0.39 2541 IN house 11.866 -0.04 2542 IsO/TS 16179 13.047 0.39 2543 ISO/TS 16179 13.047 0.39 2544 ISO/TS 16179 13.047 0.39 2545 ISO/TS 16179 13.047 0.39 2546 ISO/TS 16179 13.047 0.39 2547 In house 11.866 -0.04 2548 ISO/TS 16179 13.047 0.39 2549 ISO/TS 16179 13.047 0.39 2540 ISO/TS 16179 13.300 0.50 2540 ISO/TS 16179 13.300 0.50 2541 ISO/TS 16179 13.300 0.50						
2866   SO/TS 16179   12.22   0.09   2370   SO/Z744-1   12.4   0.15   2373   SO/Z744-1   12.9   0.34   2378   SO/Z2744-1   12.3   0.12   2379   SO/TS 16179   12.5260   0.20   2380   SO/TS 16179   12.5260   0.00   2382   SO/Z744-1   12.29   0.11   2382   SO/Z744-1   12.29   0.11   2382   SO/Z744-1   12.29   0.11   2382   SO/TS 16179   12.20   0.01   2382   SO/TS 16179   12.21   0.09   2475   In house   11.36   0.22   2426   SO/TS 16179   9.621   0.85   2427   SO/TS 16179   9.621   0.85   2428   SO/TS 16179   9.621   0.85   2429   SO/TS 16179   12.72   0.27   2429   SO/TS 16179   12.72   0.27   2429   SO/TS 16179   12.72   0.27   2420   SO/TS 16179   12.01   0.01   2525   SO/TS 16179   12.01   0.01   2525   SO/TS 16179   12.92   0.34   2526   SO/TS 16179   12.52   0.27   2527   SO/TS 16179   12.52   0.20   2528   SO/TS 16179   12.52   0.20   2529   SO/TS 16179   12.52   0.20   2520   SO/TS 16179   13.047   0.35   2520   SO/TS 16179   8.5   C - 1.26   2666   SO/TS 16179   1.3047   0.39   2673   SO/TS 16179   1.3047   0.39   2674   In house   11.866   0.04   2684   SO/TS 16179   13.047   0.39   2685   SO/TS 16179   13.047   0.39   2773   SO/TS 16179   13.047   0.39   2826   SO/TS 16179   13.047   0.39   2827   In house   11.866   0.04   2828   SO/TS 16179   13.047   0.39   2829   SO/TS 16179   13.360   0.50   3116   SO/TS 16179   13.360		ISO/TS 16179				
2373   SO(73533   12.56   0.21   2375   SO(22744-1   12.9   0.34   2378   SO(22744-1   12.3   0.12   2380   SO/TS 16179   12.5260   0.20   2380   SO/TS 16179   12.0   0.01   2382   SO(2744-1   12.29   0.11   2382   SO(75 16179   22.6   R(0.01)   3.86   2415   SO/TS 16179   12.221   0.09   2425   In house   11.36   0.22   2426   SO/TS 16179   9.621   0.65   2427   SO/TS 16179   9.621   0.65   2428   SO/TS 16179   9.621   0.65   2429   SO/TS 16179   12.72   0.77   2431   SO/TS 16179   12.72   0.77   2432   SO/TS 16179   12.01   0.01   2525   SO/TS 16179   12.01   0.01   2525   SO/TS 16179   12.5   0.19   2533   8.84   -1.14   2549   SO/TS 16179   12.5   0.19   2549   SO/TS 16179   12.5   0.19   2551   SO(75 16179   12.5   0.19   2521   SO/TS 16179   12.5   0.19   2532   SO/TS 16179   12.5   0.19   2532   SO/TS 16179   12.5   0.19   2533   SO/TS 16179   12.5   0.19   2540   SO/TS 16179   12.5   0.19   2573   SO/TS 16179   12.5   0.19   2573   SO/TS 16179   12.5   0.19   2574   SO/TS 16179   12.5   0.19   2575   In house   15.6893   1.35   2590   SO/TS 16179   1.10   0.76   2649   In house   7.62   -1.26   2666   SO/TS 16179   8.951   -1.10   2668   SO/TS 16179   8.951   -1.10   2675   In house   18.66   -0.04   2676   SO/TS 16179   13.047   0.39   2677   In house   11.866   -0.04   2678   SO/TS 16179   13.047   0.39   2679   SO/TS 16179   13.047   0.39   2670   SO/TS 16179   13.047   0.39   2671   In house   11.866   -0.04   2672   In house   11.866   -0.04   2673   SO/TS 16179   13.360   0.50   2674   SO/TS 16179   13.360   0.50   2675   SO/TS 16179   13.360   0.50   2677   SO/TS 16179   13.360   0.50   2678   SO/TS 16179   13.360   0.50   2679   SO/TS 16179   13.360   0.50   2670   SO/TS 16179   13.360   0.50   2671   SO/TS 16179   13.360   0.50   2672   SO/TS 16179   13.360   0.50   2673   SO/TS 16179   13.360   0.50   2674   SO/TS 16179   13.360   0.50   2675   SO/TS 16179   13.360   0.50   2676   SO/TS 16179   13.360   0.50   2677   SO/TS 16179   13.360   0.50   2678   SO/TS 16179   13.360   0.50   2679   SO/						
2373   SO(73533   12.56   0.21   2375   SO(22744-1   12.9   0.34   2378   SO(22744-1   12.3   0.12   2380   SO/TS 16179   12.5260   0.20   2380   SO/TS 16179   12.0   0.01   2382   SO(2744-1   12.29   0.11   2382   SO(75 16179   22.6   R(0.01)   3.86   2415   SO/TS 16179   12.221   0.09   2425   In house   11.36   0.22   2426   SO/TS 16179   9.621   0.65   2427   SO/TS 16179   9.621   0.65   2428   SO/TS 16179   9.621   0.65   2429   SO/TS 16179   12.72   0.77   2431   SO/TS 16179   12.72   0.77   2432   SO/TS 16179   12.01   0.01   2525   SO/TS 16179   12.01   0.01   2525   SO/TS 16179   12.5   0.19   2533   8.84   -1.14   2549   SO/TS 16179   12.5   0.19   2549   SO/TS 16179   12.5   0.19   2551   SO(75 16179   12.5   0.19   2521   SO/TS 16179   12.5   0.19   2532   SO/TS 16179   12.5   0.19   2532   SO/TS 16179   12.5   0.19   2533   SO/TS 16179   12.5   0.19   2540   SO/TS 16179   12.5   0.19   2573   SO/TS 16179   12.5   0.19   2573   SO/TS 16179   12.5   0.19   2574   SO/TS 16179   12.5   0.19   2575   In house   15.6893   1.35   2590   SO/TS 16179   1.10   0.76   2649   In house   7.62   -1.26   2666   SO/TS 16179   8.951   -1.10   2668   SO/TS 16179   8.951   -1.10   2675   In house   18.66   -0.04   2676   SO/TS 16179   13.047   0.39   2677   In house   11.866   -0.04   2678   SO/TS 16179   13.047   0.39   2679   SO/TS 16179   13.047   0.39   2670   SO/TS 16179   13.047   0.39   2671   In house   11.866   -0.04   2672   In house   11.866   -0.04   2673   SO/TS 16179   13.360   0.50   2674   SO/TS 16179   13.360   0.50   2675   SO/TS 16179   13.360   0.50   2677   SO/TS 16179   13.360   0.50   2678   SO/TS 16179   13.360   0.50   2679   SO/TS 16179   13.360   0.50   2670   SO/TS 16179   13.360   0.50   2671   SO/TS 16179   13.360   0.50   2672   SO/TS 16179   13.360   0.50   2673   SO/TS 16179   13.360   0.50   2674   SO/TS 16179   13.360   0.50   2675   SO/TS 16179   13.360   0.50   2676   SO/TS 16179   13.360   0.50   2677   SO/TS 16179   13.360   0.50   2678   SO/TS 16179   13.360   0.50   2679   SO/						
2378   ISOZ2744-1		ISO17353	12.56		0.21	
2379   SO/TS 16179   12.5260   0.20   2380   SO/TS 16179   12.0   0.01   2382   SO/TS 16179   12.29   0.11   2383   SO/TS 16179   12.21   0.09   2425   In house   11.36   -0.22   2426   SO/TS 16179   13.77   0.65   2449   SO/TS 16179   9.621   -0.85   2449   SO/TS 16179   12.72   0.27   2459   SO/TS 16179   6.23   -2.09   2452   SO/TS 16179   12.72   0.27   2515   SO/TS 16179   12.71   0.01   2526   SO/TS 16179   12.01   0.01   2526   SO/TS 16179   12.92   0.34   2526   SO/TS 16179   12.5   0.19   2526   SO/TS 16179   12.5   0.19   2527   SO/TS 16179   12.5   0.19   2528   In house   15.6893   1.35   2590   SO/TS 16179   12.52   0.20   2529   SO/TS 16179   12.51   0.19   2529   SO/TS 16179   12.50   0.19   2529   SO/TS 16179   12.51   0.19   2529   SO/TS 16179   12.51   0.19   2529   SO/TS 16179   12.51   0.19   2520   SO/TS 16179   12.52   0.20   2520   In house   14.067   0.76   2529   In house   14.067   0.76   2529   In house   21.510   R(0.01)   3.46   2666   SO/TS 16179   8.951   -1.10   2668   SO/TS 16179   9.0   -1.08   2678   SO/TS 16179   9.0   -1.08   2820   SO/TS 16179   13.047   0.39   2827   In house   11.866   -0.04   2820   SO/TS 16179   11.72   -0.09   2821   In house   11.866   -0.04   2822   SO/TS 16179   11.72   -0.09   2960   SO/TS 16179   11.3   -0.24   3100   SO/TS 16179   11.3   -0.24   3100   SO/TS 16179   13.360   0.50   3116   SO/T	2375	ISO22744-1	12.9		0.34	
2380 ISO/TS 16179 12.0 0.01 2382 ISO/22744-1 12.29 0.11 2386 ISO/TS 16179 12.221 0.09 2415 ISO/TS 16179 12.221 0.09 2425 In house 11.36 -0.22 2426 ISO/TS 16179 13.77 0.65 2439 ISO/TS 16179 9.621 -0.85 2453 ISO/TS 16179 9.621 -0.85 2453 ISO/TS 16179 12.72 0.27 2515 ISO/TS 16179 12.72 0.27 2515 ISO/TS 16179 12.01 0.01 2525 ISO/TS 16179 12.01 0.01 2525 ISO/TS 16179 12.92 0.34 2539 ISO/TS 16179 12.5 0.19 2539 ISO/TS 16179 12.5 0.19 2531 ISO/TS 16179 12.5 0.19 2532 ISO/TS 16179 12.5 0.19 2533 ISO/TS 16179 12.5 0.19 2531 IN house 15.6893 1.35 2590 ISO/TS 16179 12.5 0.19 2532 IsO/TS 16179 12.5 0.19 2531 In house 14.067 0.76 2649 In house 14.067 0.76 2649 In house 21.510 R(0.01) 3.46 2666 ISO/TS 16179 11.84 -0.05 2668 ISO/TS 16179 11.84 -0.05 2668 ISO/TS 16179 13.047 0.39 2820 ISO/TS 16179 13.08 0.440 2910 ISO/TS 16179 11.23 0.12 2977 3003 ISO/TS 16179 11.23 0.12 2977 3003 ISO/TS 16179 11.3 0.24 3100 ISO/TS 16179 11.3 0.05 3146 ISO/ZS 16179 11.3 0.12 3149 ISO/ZS 16179 11.3 0.12 3149 ISO/ZS 16179 11.3 0.12 3149 ISO/ZS 16179 13.360 0.50 3116 ISO/ZS 16179 13.360 0.50		ISO22744-1	12.3			
2382   ISOZTS 16179   22.6   R(0.01)   3.86   2415   ISO/TS 16179   12.221   0.09   2425   In house	2379	ISO/TS 16179	12.5260		0.20	
2386 ISO/TS 16179	2380	ISO/TS 16179	12.0		0.01	
2415 ISO/TS 16179 12.221 0.09 2425 In house 11.36 -0.22 2426 ISO/TS 16179 9.621 -0.85 2453 9.967 -0.73 2459 ISO/TS 16179 6.23 -2.09 2482 ISO/TS 16179 12.72 0.27 2515 ISO16179Mod. 9.643 -0.85 2522 ISO/TS 16179 12.01 0.01 2525 ISO/TS 16179 12.92 0.34 2533 8.84 -1.14 2549 ISO/TS 16179 12.92 0.34 2553 8.84 -1.14 2561 ISO22744-1 11.01 -0.35 2569 ISO/TS 16179 12.5 0.19 2573 ISO/TS 16179 12.5 0.19 2573 ISO/TS 16179 12.5 0.19 2582 In house 15.6893 1.35 2590 ISO/TS 16179 8.5 C -1.26 2591 In house 7.62 -1.58 2665 In house 21.510 R(0.01) 3.46 2666 ISO/TS 16179 8.951 -1.10 2668 ISO/TS 16179 8.951 -1.10 2668 ISO/TS 16179 11.84 -0.05 2678		ISO22744-1	12.29		0.11	
2425     In house     11.36     -0.22       2426     ISO/TS 16179     13.77     0.65       2449     ISO/TS 16179     9.621     -0.85       2453     9.967     -0.73       2453     9.967     -0.73       2452     ISO/TS 16179     12.72     0.27       2515     ISO/TS 16179     12.72     0.27       2515     ISO/TS 16179     12.01     0.01       2522     ISO/TS 16179     12.01     0.01       2549     ISO/TS 16179     12.92     0.34       2549     ISO/TS 16179     12.92     0.34       2553     8.84     -1.14       2561     ISO/TS 16179     12.5     0.19       2573     ISO/TS 16179     12.5     0.19       2573     ISO/TS 16179     12.52     0.20       2580     ISO/TS 16179     12.52     0.20       2590     ISO/TS 16179     8.5     C     -1.26       2591     In house     14.067     0.76       2661     In house     14.067     0.76       2668     ISO/TS 16179     8.951     -1.10       2668     ISO/TS 16179     11.84     -0.05       2678     In house     9.0     -1.08	2386	ISO/TS 16179	22.6	R(0.01)	3.86	
2426 ISO/TS 16179 9.621 -0.85 2459 ISO/TS 16179 9.623 -2.09 2482 ISO/TS 16179 6.23 -2.09 2482 ISO/TS 16179 12.72 0.27 2515 ISO/TS 16179 12.01 0.01 2525 ISO/TS 16179 12.01 0.01 2525 ISO/TS 16179 12.92 0.34 2549 ISO/TS 16179 12.92 0.34 2553 8.84 -1.14 2561 ISO22744-1 11.01 -0.35 2573 ISO/TS 16179 12.5 0.19 2582 In house 15.6893 1.35 2590 ISO/TS 16179 8.5 C -1.26 261 In house 7.62 -1.58 2665 In house 21.510 R(0.01) 3.46 2666 ISO/TS 16179 8.951 -1.10 2668 ISO/TS 16179 11.84 -0.05 2675 In house 9.8815 -0.76 2676 In house 9.8815 -0.76 2678	2415	ISO/TS 16179	12.221	. ,	0.09	
2449 ISO/TS 16179 9.621 -0.85 2459 ISO/TS 16179 12.72 -2.09 2482 ISO/TS 16179 12.72 0.27 2515 ISO16179Mod. 9.643 -0.85 2522 ISO/TS 16179 12.01 0.01 2525 ISO/TS 16179 <0.1 C <-4.31 2549 ISO/TS 16179 12.92 0.34 2553 8.84 -1.14 2561 ISO22744-1 11.01 -0.35 2569 ISO/TS 16179 12.55 0.19 2573 ISO/TS 16179 12.52 0.20 2582 In house 15.6893 1.35 2590 ISO/TS 16179 8.5 C -1.26 2591 In house 14.067 0.76 2649 In house 21.510 R(0.01) 3.46 2666 ISO/TS 16179 8.951 -1.10 2668 ISO/TS 16179 13.04 -0.05 2675 In house 9.8815 -0.76 2676 In house 9.8815 -0.76 2678	2425	In house	11.36		-0.22	
2453   9.967   -0.73   2459   ISO/TS 16179   6.23   -2.09   2482   ISO/TS 16179   12.72   0.27   2515   ISO/16179Mod.   9.643   -0.85   2522   ISO/TS 16179   12.01   0.01   2525   ISO/TS 16179   12.01   0.01   2525   ISO/TS 16179   12.92   0.34   2553   8.84   -1.14   2561   ISO2744-1   11.01   -0.35   2569   ISO/TS 16179   12.52   0.20   2582   In house   15.6893   1.35   2590   ISO/TS 16179   8.5   C   -1.26   2591   In house   14.067   0.76   2691   In house   21.510   R(0.01)   3.46   2666   ISO/TS 16179   11.84   -0.05   2668   ISO/TS 16179   11.84   -0.05   2668   ISO/TS 16179   11.84   -0.05   2678   In house   9.8815   -0.76   2678   In house   14.067   -1.08   2826   ISO/TS 16179   9.0   -1.08   2826   ISO/TS 16179   13.047   0.39   2827   In house   11.866   -0.04   2864   ISO/TS 16179   13.047   0.39   2827   In house   11.866   -0.04   2864   ISO/TS 16179   13.08   0.40   2910   ISO/TS 16179   12.31   0.12   2977         2960   ISO/TS 16179   12.31   0.12   2977         2960   ISO/TS 16179   13.360   0.50   3116   ISO/TS 16179   13.360   0.50   3116   ISO/TS 16179   12.3   0.12   3149   ISO/ZS744-1   13.66   0.61   15.072 16179   13.46   0.61   15.072 16179   13.46   0.61   15.072 16179   13.46   0.61   15.072 16179   13.46   0.61   15.072 16179   13.46   0.61   15.072 16179   13.46   0.61   15.072 16179   13.46   0.61   15.072 16179   13.46   0.61   15.072 16179   13.46   0.61   15.072 16179   13.46   0.61   15.072 16179   13.46   0.61   15.072 16179   13.46   0.61   15.072 16179   13.46   0.61   15.072 16179   13.46   0	2426	ISO/TS 16179	13.77		0.65	
2459   ISO/TS 16179   6.23   -2.09		ISO/TS 16179				
2482       ISO/TS 16179       12.72       0.27         2515       ISO16179Mod.       9.643       -0.85         2522       ISO/TS 16179       12.01       0.01         2525       ISO/TS 16179       -0.1       C       <-4.31						
2515   SO16179Mod.   9.643   -0.85     2522   SO/TS 16179   12.01   0.01     2525   SO/TS 16179   12.92   0.34     2549   SO/TS 16179   12.92   0.34     2553   8.84   -1.14     2561   ISO22744-1   11.01   -0.35     2569   ISO/TS 16179   12.5   0.19     2573   ISO/TS 16179   12.5   0.20     2573   ISO/TS 16179   12.5   0.20     2573   ISO/TS 16179   12.5   0.20     2574   In house   15.6893   1.35     2590   ISO/TS 16179   8.5   C   -1.26     2591   In house   14.067   0.76     2649   In house   14.067   0.76     2666   ISO/TS 16179   8.951   -1.10     2668   ISO/TS 16179   8.951   -1.10     2668   ISO/TS 16179   11.84   -0.05     2678         2743         2820   ISO/TS 16179   9.0   -1.08     2826   ISO/TS 16179   13.047   0.39     2827   In house   11.866   -0.04     2864   ISO/TS 16179   13.08   0.40     2910   ISO/TS 16179   11.3   0.12     2907         2003   ISO/TS 16179   11.3   0.12     2907         2003   ISO/TS 16179   13.360   0.50     3116   ISO/TS 16179   12.3   0.12     3149   ISO/Z2744-1   13.66   0.61						
2522   ISO/TS 16179   12.01   C   <4.31   Possibly a false negative test result. First reported n.d.   2549   ISO/TS 16179   12.92   0.34   2553   8.84   -1.14   2561   ISO/ZS 16179   12.5   0.19   2573   ISO/TS 16179   12.5   0.19   2573   ISO/TS 16179   12.5   0.20   2582   In house   15.6893   1.35   2590   ISO/TS 16179   8.5   C   -1.26   2591   In house   14.067   0.76   2649   In house   7.62   -1.58   2666   ISO/TS 16179   8.951   -1.10   2668   ISO/TS 16179   8.951   -1.10   2668   ISO/TS 16179   11.84   -0.05   2678       2743   2820   ISO/TS 16179   13.047   0.39   2820   ISO/TS 16179   13.047   0.39   2821   In house   11.866   -0.04   2864   ISO/TS 16179   13.08   0.40   2910   ISO/TS 16179   11.72   -0.09   2960   ISO/TS 16179   12.31   0.12   2977       3003   ISO/TS 16179   13.360   0.50   3116   ISO/TS 16179   13.366   0.61						
2525         ISO/TS 16179         <0.1         C         <-4.31         Possibly a false negative test result. First reported n.d.           2549         ISO/TS 16179         12.92         0.34           2553         8.84         -1.14           2561         ISO22744-1         11.01         -0.35           2569         ISO/TS 16179         12.5         0.19           2573         ISO/TS 16179         12.52         0.20           2582         In house         15.6893         1.35           2590         ISO/TS 16179         8.5         C         -1.26         First reported 6.66           2591         In house         14.067         0.76         0.76         0.76           2649         In house         21.510         R(0.01)         3.46         0.66         In house         21.510         R(0.01)         3.46         0.05         0.05         0.05         0.05         0.05         0.05         0.05         0.06         0.06         0.076         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.06         0.06						
2549 ISO/TS 16179 12.92 0.34 2553 8.84 -1.14 2561 ISO22744-1 11.01 -0.35 2569 ISO/TS 16179 12.5 0.19 2573 ISO/TS 16179 12.52 0.20 2582 In house 15.6893 1.35 2590 ISO/TS 16179 8.5 C -1.26 First reported 6.66 2591 In house 14.067 0.76 2649 In house 7.62 -1.58 2665 In house 21.510 R(0.01) 3.46 2666 ISO/TS 16179 8.951 -1.10 2668 ISO/TS 16179 11.84 -0.05 2675 In house 9.8815 -0.76 2675 In house 9.8815 -0.76 2678				_		
2553				С		Possibly a false negative test result. First reported n.d.
2561 ISO22744-1		ISO/TS 16179				
2569 ISO/TS 16179 12.5 0.19 2573 ISO/TS 16179 12.52 0.20 2582 In house 15.6893 1.35 2590 ISO/TS 16179 8.5 C -1.26 2591 In house 14.067 0.76 2649 In house 7.62 -1.58 2665 In house 21.510 R(0.01) 3.46 2666 ISO/TS 16179 8.951 -1.10 2668 ISO/TS 16179 11.84 -0.05 2675 In house 9.8815 -0.76 2678		100007444				
2573 ISO/TS 16179 12.52 0.20 2582 In house 15.6893 1.35 2590 ISO/TS 16179 8.5 C -1.26 First reported 6.66 2591 In house 14.067 0.76 2649 In house 7.62 -1.58 2665 In house 21.510 R(0.01) 3.46 2666 ISO/TS 16179 8.951 -1.10 2668 ISO/TS 16179 11.84 -0.05 2675 In house 9.8815 -0.76 2678 2743 2820 ISO/TS 16179 9.0 -1.08 2820 ISO/TS 16179 13.047 0.39 2827 In house 11.866 -0.04 2864 ISO/TS 16179 13.08 0.40 2910 ISO/TS 16179 11.72 -0.09 2960 ISO/TS 16179 12.31 0.12 2977 3003 ISO/TS 16179 13.360 0.50 3116 ISO/TS 16179 12.3 0.12 3149 ISO22744-1 13.66 0.61						
2582   In house   15.6893   1.35   2590   ISO/TS 16179   8.5   C   -1.26   First reported 6.66						
2590 ISO/TS 16179 8.5 C -1.26 First reported 6.66 2591 In house 14.067 0.76 2649 In house 7.62 -1.58 2665 In house 21.510 R(0.01) 3.46 2666 ISO/TS 16179 8.951 -1.10 2668 ISO/TS 16179 11.84 -0.05 2675 In house 9.8815 -0.76 2678 2820 ISO/TS 16179 9.0 -1.08 2826 ISO/TS 16179 13.047 0.39 2827 In house 11.866 -0.04 2864 ISO/TS 16179 13.08 0.40 2910 ISO/TS 16179 11.72 -0.09 2960 ISO/TS 16179 12.31 0.12 2977 3003 ISO/TS 16179 11.3 -0.24 3100 ISO/TS 16179 13.360 0.50 3116 ISO/TS 16179 12.3 0.12 3149 ISO22744-1 13.66 0.61						
2591     In house     14.067     0.76       2649     In house     7.62     -1.58       2665     In house     21.510     R(0.01)     3.46       2666     ISO/TS 16179     8.951     -1.10       2668     ISO/TS 16179     11.84     -0.05       2675     In house     9.8815     -0.76       2678         2743         2820     ISO/TS 16179     9.0     -1.08       2826     ISO/TS 16179     13.047     0.39       2827     In house     11.866     -0.04       2864     ISO/TS 16179     13.08     0.40       2910     ISO/TS 16179     11.72     -0.09       2960     ISO/TS 16179     12.31     0.12       2977         3003     ISO/TS 16179     13.360     0.50       3116     ISO/TS 16179     12.3     0.12       3149     ISO22744-1     13.66     0.61				C		First reported 6.66
2649       In house       7.62       -1.58         2665       In house       21.510       R(0.01)       3.46         2666       ISO/TS 16179       8.951       -1.10         2668       ISO/TS 16179       11.84       -0.05         2675       In house       9.8815       -0.76         2678           2743           2820       ISO/TS 16179       9.0       -1.08         2826       ISO/TS 16179       13.047       0.39         2827       In house       11.866       -0.04         2864       ISO/TS 16179       13.08       0.40         2910       ISO/TS 16179       11.72       -0.09         2960       ISO/TS 16179       12.31       0.12         2977           3003       ISO/TS 16179       11.3       -0.24         3116       ISO/TS 16179       13.360       0.50         3116       ISO/TS 16179       12.3       0.12         3149       ISO22744-1       13.66       0.61				C		First reported 6.66
2665 In house 21.510 R(0.01) 3.46 2666 ISO/TS 16179 8.951 -1.10 2668 ISO/TS 16179 11.84 -0.05 2675 In house 9.8815 -0.76 2678 2743 2820 ISO/TS 16179 9.0 -1.08 2826 ISO/TS 16179 13.047 0.39 2827 In house 11.866 -0.04 2864 ISO/TS 16179 13.08 0.40 2910 ISO/TS 16179 11.72 -0.09 2960 ISO/TS 16179 12.31 0.12 2977 3003 ISO/TS 16179 11.3 -0.24 3100 ISO/TS 16179 13.360 0.50 3116 ISO/TS 16179 12.3 0.12 3149 ISO22744-1 13.66 0.61						
2666       ISO/TS 16179       8.951       -1.10         2668       ISO/TS 16179       11.84       -0.05         2675       In house       9.8815       -0.76         2678           2743           2820       ISO/TS 16179       9.0       -1.08         2826       ISO/TS 16179       13.047       0.39         2827       In house       11.866       -0.04         2864       ISO/TS 16179       13.08       0.40         2910       ISO/TS 16179       11.72       -0.09         2960       ISO/TS 16179       12.31       0.12         2977				P(0.01)		
2668       ISO/TS 16179       11.84       -0.05         2675       In house       9.8815       -0.76         2678           2743           2820       ISO/TS 16179       9.0       -1.08         2826       ISO/TS 16179       13.047       0.39         2827       In house       11.866       -0.04         2864       ISO/TS 16179       13.08       0.40         2910       ISO/TS 16179       11.72       -0.09         2960       ISO/TS 16179       12.31       0.12         2977           3003       ISO/TS 16179       11.3       -0.24         3100       ISO/TS 16179       13.360       0.50         3116       ISO/TS 16179       12.3       0.12         3149       ISO22744-1       13.66       0.61				13(0.01)		
2675       In house       9.8815       -0.76         2678           2743           2820       ISO/TS 16179       9.0       -1.08         2826       ISO/TS 16179       13.047       0.39         2827       In house       11.866       -0.04         2864       ISO/TS 16179       13.08       0.40         2910       ISO/TS 16179       11.72       -0.09         2960       ISO/TS 16179       12.31       0.12         2977           3003       ISO/TS 16179       11.3       -0.24         3100       ISO/TS 16179       13.360       0.50         3116       ISO/TS 16179       12.3       0.12         3149       ISO22744-1       13.66       0.61						
2678           2743           2820       ISO/TS 16179       9.0       -1.08         2826       ISO/TS 16179       13.047       0.39         2827       In house       11.866       -0.04         2864       ISO/TS 16179       13.08       0.40         2910       ISO/TS 16179       11.72       -0.09         2960       ISO/TS 16179       12.31       0.12         2977           3003       ISO/TS 16179       11.3       -0.24         3100       ISO/TS 16179       13.360       0.50         3116       ISO/TS 16179       12.3       0.12         3149       ISO22744-1       13.66       0.61						
2743  2820 ISO/TS 16179  2826 ISO/TS 16179  13.047  0.39  2827 In house  11.866  -0.04  2864 ISO/TS 16179  13.08  0.40  2910 ISO/TS 16179  11.72  -0.09  2960 ISO/TS 16179  12.31  0.12  2977   3003 ISO/TS 16179  11.3  -0.24  3100 ISO/TS 16179  13.360  0.50  3116 ISO/TS 16179  12.3  0.12  3149 ISO22744-1  13.66     13.08		III IIOGSC				
2820       ISO/TS 16179       9.0       -1.08         2826       ISO/TS 16179       13.047       0.39         2827       In house       11.866       -0.04         2864       ISO/TS 16179       13.08       0.40         2910       ISO/TS 16179       11.72       -0.09         2960       ISO/TS 16179       12.31       0.12         2977           3003       ISO/TS 16179       11.3       -0.24         3100       ISO/TS 16179       13.360       0.50         3116       ISO/TS 16179       12.3       0.12         3149       ISO22744-1       13.66       0.61						
2826       ISO/TS 16179       13.047       0.39         2827       In house       11.866       -0.04         2864       ISO/TS 16179       13.08       0.40         2910       ISO/TS 16179       11.72       -0.09         2960       ISO/TS 16179       12.31       0.12         2977           3003       ISO/TS 16179       11.3       -0.24         3100       ISO/TS 16179       13.360       0.50         3116       ISO/TS 16179       12.3       0.12         3149       ISO22744-1       13.66       0.61		ISO/TS 16179				
2827       In house       11.866       -0.04         2864       ISO/TS 16179       13.08       0.40         2910       ISO/TS 16179       11.72       -0.09         2960       ISO/TS 16179       12.31       0.12         2977           3003       ISO/TS 16179       11.3       -0.24         3100       ISO/TS 16179       13.360       0.50         3116       ISO/TS 16179       12.3       0.12         3149       ISO22744-1       13.66       0.61						
2864       ISO/TS 16179       13.08       0.40         2910       ISO/TS 16179       11.72       -0.09         2960       ISO/TS 16179       12.31       0.12         2977           3003       ISO/TS 16179       11.3       -0.24         3100       ISO/TS 16179       13.360       0.50         3116       ISO/TS 16179       12.3       0.12         3149       ISO22744-1       13.66       0.61						
2910       ISO/TS 16179       11.72       -0.09         2960       ISO/TS 16179       12.31       0.12         2977           3003       ISO/TS 16179       11.3       -0.24         3100       ISO/TS 16179       13.360       0.50         3116       ISO/TS 16179       12.3       0.12         3149       ISO22744-1       13.66       0.61						
2960     ISO/TS 16179     12.31     0.12       2977         3003     ISO/TS 16179     11.3     -0.24       3100     ISO/TS 16179     13.360     0.50       3116     ISO/TS 16179     12.3     0.12       3149     ISO22744-1     13.66     0.61						
2977         3003     ISO/TS 16179     11.3     -0.24       3100     ISO/TS 16179     13.360     0.50       3116     ISO/TS 16179     12.3     0.12       3149     ISO22744-1     13.66     0.61						
3003       ISO/TS 16179       11.3       -0.24         3100       ISO/TS 16179       13.360       0.50         3116       ISO/TS 16179       12.3       0.12         3149       ISO22744-1       13.66       0.61		-				
3100 ISO/TS 16179 13.360 0.50 3116 ISO/TS 16179 12.3 0.12 3149 ISO22744-1 13.66 0.61		ISO/TS 16179				
3116 ISO/TS 16179 12.3 0.12 3149 ISO22744-1 13.66 0.61						
3149 ISO22744-1 13.66 0.61						
3154 ISO/TS 16179 10.61 -0.50	3149	ISO22744-1	13.66		0.61	
	3154	ISO/TS 16179	10.61		-0.50	

lab	method	value	mark	z(targ)	remarks
3172	ISO/TS 16179	12.677		0.25	
3176	In house	12.45	С	0.17	First reported 16.96
3185	ISO/TS 16179	12.380		0.15	
3197	ISO/TS 16179	13.7		0.63	
3210		13.34		0.50	
3214	ISO/TS 16179	12.710		0.27	
3218	ISO/TS 16179	14.765		1.01	
3228	ISO/TS 16179	11.92		-0.02	
3230					
3237		15.15		1.15	
3246	ISO/TS 16179	12.666		0.25	
	normality	suspect			
	n 	77			
	outliers	2			
	mean (n)	11.9748	DCD - 400/		
	st.dev. (n)	1.90614	RSD = 16%		
	R(calc.)	5.3372			
	st.dev.(ISO/TS16179:12)	2.75420			
	R(ISO/TS16179:12)	7.7118			

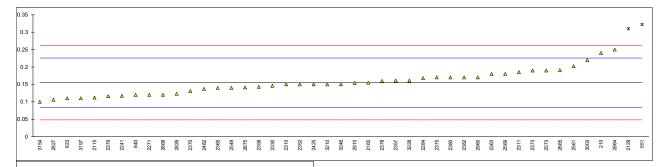


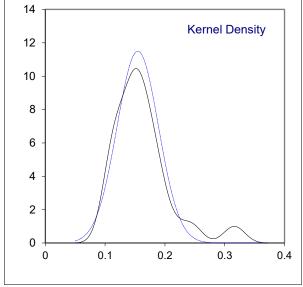


# Determination of Monobutyltin (MBT) on sample #22811; results in mg/kg

lab	method	value	mark	z(targ)	remarks
110	ISO/TS 16179	<0.1			
210	In house	0.24		2.40	
551	ISO/TS 16179	0.3220	R(0.01)	4.71	
623	ISO/TS 16179	0.110		-1.26	
840	ISO/TS 16179Mod.	0.12	С	-0.97	First reported "not detected"
2115	In house	0.112		-1.20	
2129	ISO/TS 16179	0.31	R(0.01)	4.37	
2165	ISO/TS 16179	0.155		0.01	
2217					
2232 2241	ISO/TS 16179	0.117		-1.06	
2241	ISO/TS 16179	not detected		-1.00	
2265	100/10 101/3				
2271	ISO/TS 16179	0.12		-0.97	
2284	ISO/TS 16179	0.168		0.38	
2300	ISO/TS 16179	<0.2	С		First reported "not detected"
2301					·
2310	ISO22744-1	0.15		-0.13	
2311	ISO22744-1	0.1853		0.86	
2320	ISO22744-1	<0.1	С		First reported "not detected"
2326	ISO22744-1	ND			
2330	ISO/TS 16179	0.146		-0.24	
2350	ISO/TS 16179	< 0.5		0.12	
2352 2357	GB/T20385.1 ISO/TS 16179	0.150 0.161		-0.13 0.18	
2358	130/13 101/9	0.143		-0.33	
2363	ISO22744	0.143		0.33	
2365	ISO/TS 16179	0.14		-0.41	
2366	ISO/TS 16179	<0.5			
2370	ISO17353	0.131		-0.66	
2373	ISO17353	0.19		0.99	
2375	ISO22744-1	0.17		0.43	
2378	ISO22744-1	0.16		0.15	
2379	ISO22744-1	0.1162		-1.08	
2380	ISO/TS 16179	0.17		0.43	
2382	ISO22744-1	0.17		0.43	
2386	ISO/TS 16179	<0.20			
2415 2425	In house	 0.15		-0.13	
2425	ISO/TS 16179	Not detected		-0.13	
2449	100/10 101/3				
2453					
2459	ISO/TS 16179	ND			
2482	ISO/TS 16179	0.1371		-0.49	
2515					
2522					
2525	ISO/TS 16179	<0.1	С		First reported "not detected"
2549	ISO/TS 16179	0.14		-0.41	
2553	18000744 4	0.2022	0	1.24	First reported "not detected"
2561	ISO22744-1	0.2022	С	1.34	First reported "not detected"
2569 2573	ISO17353 ISO/TS 16179	0.18 0.19		0.71 0.99	
2573 2582	In house	Not detected		0.99	
2590	110400				
2591					
2649					
2665	In house	0.1905		1.01	
2666					
2668	ISO/TS 16179	0.12		-0.97	
2675	In house	0.1413		-0.38	
2678					
2743					
2820 2826	ISO/TS 16170	0.1231		-0.89	
2826 2827	ISO/TS 16179 In house	0.1231		-0.89 -1.37	
282 <i>1</i> 2864	ISO/TS 16179	0.106	С	-1.37 2.68	First reported "not detected"
2910	ISO/TS 16179	0.25	J	<b>-</b> 0.02	i not reported that detected
2960	ISO/TS 16179	0.134		0.43	
2977					
3003	ISO/TS 16179	0.22		1.84	
3100	ISO/TS 16179	< 0.20			
3116					
3149					
3154	ISO/TS 16179	0.1	С	-1.54	First reported "not detected"

lab	method	value	mark	z(targ)	remarks
3172	ISO/TS 16179	< 0.02			
3176					
3185	ISO/TS 16179	<0.2			
3197	ISO/TS 16179	0.11		-1.26	
3210		0.15		-0.13	
3214	ISO/TS 16179	<0.1			
3218	ISO/TS 16179	<0.20	С		First reported "not detected"
3228	ISO/TS 16179	0.161		0.18	
3230					
3237					
3246	ISO/TS 16179	0.150		-0.13	
	normality	OK			
	n	43			
	outliers	2			
	mean (n)	0.15464			
	st.dev. (n)	0.034708	RSD = 22%		
	R(calc.)	0.09718	1100 - 2270		
	st.dev.(ISO/TS16179:12)	0.035568			
	R(ISO/TS16179:12)	0.09959			
	14(188,1818110.12)	0.00000			

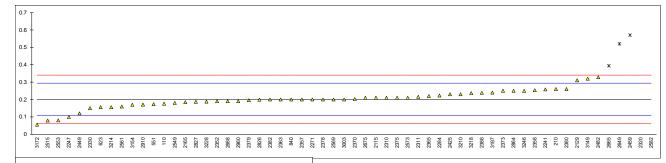


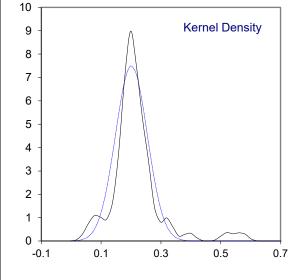


# Determination of Dibutyltin (DBT) on sample #22811; results in mg/kg

lab	method	value	mark	z(targ)	remarks
110	ISO/TS 16179	0.176		-0.55	
210	In house	0.26		1.26	
551	ISO/TS 16179 ISO/TS 16179	0.1734		-0.61	
623 840	ISO/TS 16179 ISO/TS 16179Mod.	0.156 0.20	С	-0.98 -0.03	First reported "not detected"
2115	In house	0.20	C	0.18	First reported 0.458
2129	ISO/TS 16179	0.31	O .	2.34	That reported 0.400
2165	ISO/TS 16179	0.185		-0.35	
2217					
2232					
2241	ISO/TS 16179	0.258		1.22	
2247	ISO/TS 16179	0.100		-2.19	
2265	100/70 40470				
2271 2284	ISO/TS 16179 ISO/TS 16179	0.200 0.223		-0.03 0.47	
2300	ISO/TS 16179	<0.2	С	0.47	First reported "not detected"
2301	100/10 101/3		O		That reported flot detected
2310	ISO22744-1	0.21		0.18	
2311	ISO22744-1	0.2155		0.30	
2320	ISO22744-1	4.797	C,R(0.01)	99.19	First reported 2.712
2326	ISO22744-1	ND			
2330	ISO/TS 16179	0.150		-1.11	
2350	ISO/TS 16179	< 0.5			
2352	GB/T20385.1	0.190		-0.25	
2357 2358	ISO/TS 16179	0.200 0.254		-0.03 1.13	
2363	ISO22744	0.20		-0.03	
2365	ISO/TS 16179	0.22		0.40	
2366	ISO/TS 16179	<0.5			
2370	ISO17353	0.203		0.03	
2373	ISO17353	0.25		1.05	
2375	ISO22744-1	0.21		0.18	
2378	ISO22744-1	0.20		-0.03	
2379	ISO22744-1	0.1960		-0.12	
2380 2382	ISO/TS 16179 ISO22744-1	0.26 0.20		1.26 -0.03	
2386	ISO/TS 16179	0.238		0.79	
2415	100/10 101/3				
2425	In house	0.23		0.62	
2426	ISO/TS 16179	Not detected			
2449	ISO/TS 16179	0.12	С	-1.76	First reported 0.052
2453					
2459	ISO/TS 16179	0.57	R(0.01)	7.96	
2482	ISO/TS 16179	0.3278		2.73	
2515 2522	ISO 16179Mod. ISO/TS 16179	0.079 <0.1		-2.64 	
2525	ISO/TS 16179	<0.1	С		First reported "not detected"
2549	ISO/TS 16179	0.18	· ·	-0.46	
2553		0.08	С	-2.62	First reported 0.05
2561	ISO22744-1	0.16		-0.89	
2569	ISO17353	0.2		-0.03	
2573	ISO/TS 16179	0.21	D(0.04)	0.18	
2582 2590	In house	5.0699	R(0.01)	105.08	
2590 2591	In house	Not detected			
2649	In house	0.52	R(0.01)	6.88	
2665	In house	0.3937	R(0.05)	4.15	
2666			. ,		
2668	ISO/TS 16179	0.19		-0.25	
2675	In house	0.2096		0.18	
2678					
2743 2820					
2826	ISO/TS 16179	0.1986		-0.06	
2827	In house	0.187		-0.31	
2864	ISO/TS 16179	0.25	С	1.05	First reported "not detected"
2910	ISO/TS 16179	0.171		-0.66	
2960	ISO/TS 16179	0.19		-0.25	
2977	ISO/TS 16170	0.20		0.02	
3003	ISO/TS 16179	0.20		-0.03	
3100	ISO/TS 16179	<0.20			
3116 3149	ISO22744-1	0.32		2.56	
3154	ISO/TS 16179	0.32	С	-0.68	First reported "not detected"
0107	.50,10 .0170	J	•	0.00	oportou not dotottou

lab	method	value	mark	z(targ)	remarks
3172	ISO/TS 16179	0.0555		-3.15	
3176					
3185	ISO/TS 16179	<0.2			
3197	ISO/TS 16179	0.24		0.83	
3210		0.23		0.62	
3214	ISO/TS 16179	0.156		-0.98	
3218	ISO/TS 16179	0.237		0.77	
3228	ISO/TS 16179	0.188		-0.29	
3230					
3237					
3246	ISO/TS 16179	0.250		1.05	
	normality	suspect			
	n	54			
	outliers	5			
	mean (n)	0.20143			
	st.dev. (n)	0.053228	RSD = 26%		
	R(calc.)	0.14904			
	st.dev.(ISO/TS16179:12)	0.046330			
	R(ISO/TS16179:12)	0.12972			
	( == = = = )				

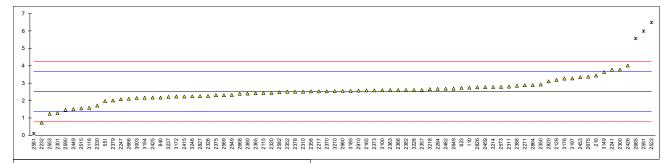


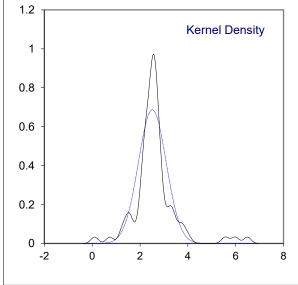


# Determination of Tributyltin (TBT) on sample #22811; results in mg/kg

lab	method	value	mark	z(targ)	remarks
110	ISO/TS 16179	2.742	········	0.39	
210	In house	3.44		1.60	
551	ISO/TS 16179	1.9679		-0.94	
623	ISO/TS 16179	2.727		0.37	
840	ISO/TS 16179Mod.	2.17		-0.60	
2115	In house	2.433		-0.14	
2129	ISO/TS 16179	3.18		1.15	
2165	ISO/TS 16179	2.58		0.11	
2217	ISO/TS 16179	2.527		0.02	
2232	ISO/TS 16179	0.733		-3.08	
2241	ISO/TS 16179	3.770		2.17	
2247	ISO/TS 16179	2.071		-0.77	
2265					
2271	ISO/TS 16179	2.88		0.63	
2284	ISO/TS 16179	2.668		0.27	
2300	ISO/TS 16179	3.78	С	2.19	First reported 4.59
2301		1.28	С	-2.13	First reported "not detected"
2310	ISO22744-1	2.50		-0.02	
2311	ISO22744-1	2.8017		0.50	
2320	ISO22744-1	2.433		-0.14	
2326	ISO22744-1	2.257		-0.44	
2330	ISO/TS 16179	1.710		-1.39	
2350	ISO/TS 16179	2.920		0.70	
2352	GB/T20385.1	2.500		-0.02	
2357	ISO/TS 16179	2.610		0.17	
2358		2.526		0.02	
2363	ISO22744	2.60		0.15	
2365	ISO/TS 16179	2.42		-0.16	
2366	ISO/TS 16179	2.60		0.15	
2370	ISO17353	2.53		0.03	
2373	ISO17353	2.58		0.11	
2375	ISO22744-1	2.3		-0.37	
2378	ISO22744-1	2.5		-0.02	
2379	ISO22744-1	2.0035		-0.88	
2380	ISO/TS 16179	2.4		-0.20	
2382	ISO22744-1	2.60		0.15	
2386	ISO/TS 16179	2.85		0.58	
2415	ISO/TS 16179	2.231		-0.49	
2425 2426	In house	2.17 4.015		-0.60 2.60	
2449	ISO/TS 16179			-1.74	
2449	ISO/TS 16179	1.51 3.339		1.43	
2459	ISO/TS 16179	2.77		0.44	
2482	ISO/TS 16179	2.676		0.28	
2515	ISO 16179Mod.	1.55	С	-1.67	First reported 1.087
2522	ISO/TS 16179	6.49	C,R(0.01)	6.88	First reported 4.47
2525	ISO/TS 16179	<0.1	C, (0.01)	<-4.17	Possibly a false negative test result. First reported n.d.
2549	ISO/TS 16179	2.32	· ·	-0.34	. coolary a raiso magains toot roomin r not roportou man
2553		1.24		-2.20	
2561	ISO22744-1	0.10	R(0.01)	-4.17	
2569	ISO17353	2.3	. ,	-0.37	
2573	ISO/TS 16179	2.78		0.46	
2582	In house	2.4799		-0.06	
2590	ISO/TS 16179	1.47		-1.81	
2591	In house	5.981	R(0.01)	6.00	
2649	In house	2.68		0.29	
2665	In house	5.5655	R(0.01)	5.28	
2666	ISO/TS 16179	2.101		-0.71	
2668	ISO/TS 16179	2.39		-0.21	
2675	In house	3.3780		1.49	
2678					
2743					
2820	ISO/TS 16179	3.1		1.01	
2826	ISO/TS 16179	2.760		0.43	
2827	In house	2.250		-0.46	
2864	ISO/TS 16179	2.89		0.65	
2910	ISO/TS 16179	2.566		0.09	
2960	ISO/TS 16179	2.55		0.06	
2977 3003	ISO/TS 16179	2.15		-0.63	
3100		2.15 2.594		-0.63 0.14	
3116	ISO/TS 16179 ISO/TS 16179	2.594 1.58		-1.62	
3149	ISO22744-1	3.64	С	1.95	First reported 4.79
3154	ISO/TS 16179	2.16	J	-0.61	i not reported 4.70
0.04	.50,10 10110	2.10		0.01	

lab	method	value	mark	z(targ)	remarks
3172	ISO/TS 16179	2.2297		-0.49	
3176	In house	3.26		1.29	
3185	ISO/TS 16179	2.550		0.06	
3197	ISO/TS 16179	3.27		1.31	
3210		2.54		0.04	
3214	ISO/TS 16179	2.775		0.45	
3218	ISO/TS 16179	2.654		0.24	
3228	ISO/TS 16179	2.601		0.15	
3230					
3237		2.21		-0.53	
3246	ISO/TS 16179	2.242		-0.47	
	normality	suspect			
	n	75 <sup>'</sup>			
	outliers	4			
	mean (n)	2.5142			
	st.dev. (n)	0.58106	RSD = 23%		
	R(calc.)	1.6270			
	st.dev.(ISO/TS16179:12)	0.57826			
	R(ISO/TS16179:12)	1.6191			





APPENDIX 2
Determination of other Organotin components on sample #22810; results in mg/kg

MMT = Monomethyltin = TributyItin = Tributyitin = Tetrabutyltin = Trioctyltin = Diphenyltin = Triphenyltin = Tricyclohexyltin = Dimethyltin = Trimethyltin DMT TeBT TMT TOT = Tripropyltin = Monobutyltin = Dibutyltin TPT DPhT MBT TPhT TCyHT DBT

						•	,	•				
lab		DMT	TMT	TPT	MBT	DBT	TBT	TeBT	TOT	DPhT	TPhT	ТСуНТ
110		<0.1	<0.1	<0.1	<0.1	0.146	0.112	<0.1	<0.1	<0.1	<0.1	<0.1
210												
551							0.1665					
	not	not	not	not	not	not	not	not	not	not	not	not
623	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detecte
	not	not	not	not	not	not	not	not	not	not	not	not
840	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detecte
2115		0.054			0.082				0.057			
2129	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1
					not	not		not			not	not
2165					detected	detected	0.095	detected			detected	detecte
2217												
2232												
	not	not	not	not	not	not	not	not		not	not	not
2241	detected	detected	detected	detected	detected	detected	detected	detected	0.091	detected	detected	detecte
	not	not	not	not		not		not	not	not	not	not
2247	detected	detected	detected	detected	0.055	detected	0.101	detected	detected	detected	detected	detecte
2265												
	not	not	not	not	not	not		not	not	not	not	not
2271	detected	detected	detected	detected	detected	detected	0.12	detected	detected	detected	detected	detecte
2284	<0.025	<0.025	<0.025	<0.025	0.048	<0.025	0.112	<0.025	0.061	<0.025	<0.025	<0.025
	not	not	not	not	not	not	not	not	not	not	not	not
2300	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detecte
2301							0.16		0.07			
	not	not	not	not	not	not		not	not	not	not	not
2310	detected	detected	detected	detected	detected	detected	0.09	detected	detected	detected	detected	detecte
	not		not	not		not		not		not	not	not
2311	detected	<0.025	detected	detected	<0.025	detected	0.1149	detected	<0.025	detected	detected	detecte
	not	not	not	not	not	not	not	not	not	not	not	not
2320	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detecte
2326		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	not	not	not	not	not	not	110	not	not	not	not	not
2330	detected	detected	detected	detected	detected	detected	0.127	detected	detected	detected	detected	detecte
2350	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2352							0.100					
2357							0.100					
2001	not	not	not	not	not	not	not	not	not	not	not	not
2358	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detect
2000	not	not	not	not	not	not	uelecieu	not	detected	not	not	not
2363		detected	detected	detected	detected	detected	0.1	detected	0.1	detected	detected	detecte
2365	< 0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	<0.05	<0.05	0.06	< 0.05	< 0.05	< 0.05
2366		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.123	<0.02	0.0688	<0.02	<0.02	<0.02
2373		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2375							0.12					
2378	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	not	not	not	not	not	not	not	not		not	not	not
2379	detected	detected	detected	detected	detected	detected	detected	detected	0.0530	detected	detected	detect
2380	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2382	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.10	<0.05	0.10	<0.05	<0.05	<0.05
	not	not	not	not	not	not	not	not	not	not	not	not
2386	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detecte
2415												
	not	not	not	not	not	not		not		not	not	not
2425	detected	detected	detected	detected	detected	detected	0.13	detected	0.06	detected	detected	detect
	not	not	not	not	not	not	not	not	not	not	not	not
2426	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detect
2449					0.051		0.152		0.061			
							0.2550					
2453												
2453 2459		ND	ND	ND	ND	ND	ND	ND	ND	NI)	NI)	NI)
2459		ND < 0,05	ND < 0.05	ND < 0.05	ND 0.0384	ND < 0,025	ND 0.0726	ND < 0,025	ND 0.0697	ND < 0,1	ND < 0,1	ND < 0,1

	lab	MMT	DMT	TMT	TPT	MBT	DBT	TBT	TeBT	TOT	DPhT	TPhT	TCyHT
								0.146		0.051			
	2522						<0.1	<0.1				<0.1	
		not	not	not	not				not	not	not	not	not
	2525	detected	detected	detected	detected	0.2223	0.14	3.8147	detected	detected	detected	detected	detected
<u> </u>		not	not	not	not	not	not		not		not	not	not
	2549	detected	detected	detected	detected	detected	detected	0.11	detected	0.07	detected	detected	detected
	2553							0.09		0.05			
		not		not	not	not							
	2561	detected	0.07	detected	detected	detected							
	0500		not	not	not	not	not	0.44	not	not	not	not	not
	2569		detected	detected	detected	detected	detected	0.11	detected	detected	detected	detected	detected
	2573	not detected											
	2010	not											
	2582	detected											
	2590												
				not	not		not	not	not	not		not	not
	2591			detected	detected		detected	detected	detected	detected		detected	detected
	2649												
	2665	<0.001	0.0289	0.0024	<0.001	0.0387	<0.001	0.0640	<0.001	0.0357	<0.001	<0.001	<0.001
	2666												
		not	not	not	not	not	not		not		not	not	not
	2668	detected	detected	detected	detected	detected	detected	0.094	detected	0.054	detected	detected	detected
		not		not			not					not	not
		detected	0.1332	detected	0.0437	0.0370	detected	0.1910		0.0610		detected	detected
	2678												
	2743												
	2820												
	2020				not	not	not	0.4047	not	not		not	not
	2826				detected	detected	detected	0.1047	detected	detected	not.	detected	detected
	2827	not detected	not detected	not detected	not detected	not detected	not detected	0.103	not detected	0.063	not detected	not detected	not detected
	2021	uctoolou	detected	detected	detected	not	not	not	not	0.000	detected	not	not
	2864					detected	detected	detected	detected			detected	detected
						not	not		not			not	not
	2910					detected	detected	0.113	detected			detected	detected
		not	not	not	not	not	not		not	not	not	not	not
	2960	detected	detected	detected	detected	detected	detected	0.09	detected	detected	detected	detected	detected
	2977												
	3003					0.05		0.11		0.05			
	3100	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
	3116							0.108					
	3149							0.12					
		not		not									
		detected		detected		detected						detected	
		< 0.02	0.0343	< 0.02	< 0.02	0.0337	< 0.02	< 0.02	< 0.02	0.0653	< 0.02	< 0.02	< 0.02
	3176												
	3185					<0.2	<0.2	<0.2	<0.2			<0.2	<0.2
		<0,02	<0,02	<0,02	<0,02	<0,02	<0,02	0.09	<0,02	0.14	<0,02	<0,02	<0,02
	3210		<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1
	3214		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	2240	not											
	J∠IÖ	detected											
	3228					not	not detected	0.101	not detected			not detected	not
	3230					detected	detected						detected
	3237												
	J2J1	not	not	not	not		not		not		not	not	not
	3246	detected	detected	detected	detected		detected		detected		detected	detected	detected
	J_70	20100100	30.00.00	30.00.00	30.00.00		30.00.00		30.00.00		30.00.00	30.00.00	30.00.00

Lab 2301 first reported for TBT 0.018 Lab 2379 first reported for TOT 0.2041 Lab 2525 first reported for DBT not detected Lab 2675 first reported for TBT 0.2098 Lab 3116 first reported for TBT 0.0540 Lab 3154 first reported for DMT 0.02

# Determination of other Organotin components on sample #22811; results in mg/kg

= Dioctyltin = Trioctyltin = Diphenyltin = Triphenyltin MMT = Monomethyltin DOT = Dimethyltin = Trimethyltin DMT TOT TMT DPhT TPhT TPT = Tripropyltin TeBT = Tetrabutyltin TCyHT = Tricyclohexyltin MOT = Monooctyltin

lab	MMT	DMT	TMT	TPT	TeBT	MOT	DOT	TOT	DPhT	TPhT	TCyHT
110	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
210											
551											
	not										
623	detected										
	not										
	detected										
2115		0.064									
2129	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1
2165					not	not	not			not detected	not
2217					detected	detected	detected				detected
2232											
2232	not										
2241	detected										
	not	not	not	not	not	not	dottottod	not	not	not	not
2247		detected	detected	detected	detected	detected	0.148	detected	detected	detected	detected
2265											
	not										
2271	detected										
2284	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
	not										
2300	detected										
								not			
2301								detected			
0040	not										
2310	detected										
2311	not detected										
2011	not										
2320	detected										
2326		ND									
	not										
2330	detected										
2350	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2352											
2357											
2358											
	not										
	detected										
2365	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2373		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2375											
2378	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2270	not										
	detected										
2380	<0.1	<0.1 <0.05	<0.1 <0.05	<0.1 <0.05	<0.1	<0.1	<0.1 <0.05	<0.1 <0.05	<0.1 <0.05	<0.1 <0.05	<0.1 <0.05
2302	not			not	<0.05	<0.05 not		not	not	not	not
2386	detected	not detected	not detected	detected	not detected	detected	not detected	detected	detected	detected	detected
2415											
2710	not										
2425	detected										
	not										
2426	detected										
2449			0.0251								
2453											
2459	ND										
	< 0,05	< 0,05	< 0,05	< 0,05	< 0,025	< 0,025	< 0,025	< 0,1	< 0,1	< 0,1	< 0,1
2515											
_											

lab	MMT	DMT	TMT	TPT	TeBT	MOT	DOT	TOT	DPhT	TPhT	TCyHT
2522	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	<0.1	NA
	not	not	not	not	not				not	not	not
2525	detected	detected	detected	detected	detected	1.00	14.78	0.11	detected	detected	detected
	not	not	not	not	not	not	not	not	not	not	not
2549	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected
2553											
	not	not	not	not	not	not	not	not	not	not	not
2561	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected
0500		not	not	not	not		not	not	not	not	not
2569		detected	detected	detected	detected		detected	detected	detected	detected	detected
2572	not	not	not	not	not	not	not	not	not	not	not
23/3	detected not	not	detected not	detected not	detected not	not	detected	not	detected	not	not
2582	detected	detected	detected	detected	detected	detected	not detected	detected	not detected	detected	detected
2590											
2000			not	not	not		not	not		not	not
2591			detected	detected	detected		detected	detected		detected	detected
2649											
	<0.001	0.0296	0.0015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2666											
	not	not	not	not	not	not	not	not	not	not	not
2668	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected
	not		not			not				not	not
2675	detected	0.0921	detected	0.0336		detected	0.0856	0.0095		detected	detected
2678											
2743											
2820											
				not	not	not	not	not		not	not
2826				detected	detected	detected	detected	detected		detected	detected
	not	not	not	not	not	not	not	not	not	not	not
2827	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected
0004					not	not	not			not	not
2864					detected	detected	detected			detected	detected
2910					not detected	not detected	not detected			not detected	not detected
2310	not	not	not	not	not	not	not	not	not	not	not
2960	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected
3003											
3100	<0.20	<0.20	<0.20	<0.20	<0.20	< 0.20	< 0.20	<0.20	<0.20	<0.20	<0.20
3116											
3149											
	not	not	not	not	not	not	not	not	not	not	not
3154	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected
3172	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
3176											
3185					<0.2	<0.2	<0.2			<0.2	<0.2
3197	<0,02	<0,02	<0,02	<0,02	<0,02	<0,02	<0,02	<0,02	<0,02	<0,02	<0,02
3210	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
3214	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	not	not	not	not	not	not	not	not	not	not	not
3218	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected
2022					not	not	not			not	not
3228					detected	detected	detected			detected	detected
3230											
3237											not.
2246	not	not	not	not	not	not	not	not	not	not	not
3240	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected	detected

Lab 2301 first reported for TOT 0.88 Lab 2525 first reported for MOT, DOT and TOT not detected

# **APPENDIX 3 Analytical details**

	ISO/IEC					Extrac-	Evtros	nU ofter	Aci-
	17025		Sample			tion	Extrac- tion	pH after adding	dified
	accre-	Sample	intake	Extraction		time	temp	the	to pH
lab	dited	preparation	(g)	type	Extraction solvent	(min)	(°C)	buffer	4.5
110	Yes	Further cut		Ultrasonic	MeOH : EtOH (80:20 V/V)	60 min	60°C	6.10-6.15	No
210	Yes	Further cut	1g	Ultrasonic					
551	Yes	Further cut	0.5g	Ultrasonic	MeOH:EtOH 80/20%	60 min	60 °C	4.5	No
623	Yes	Further cut	1	Ultrasonic	methanol : ethanol	60	60		
840	No	Further cut	0.5	Ultrasonic	MEOH:ETHANOL (8:2)	60	60	4.5	No
2115	Yes	Used as received	1 g	Ultrasonic	EtOH - Acetic acid (95:5)	60 min	60 °C		Yes
2129	Yes	Used as received	0,6g	Ultrasonic	HCl solution in methanol	60 min	60 °C	4,66	No
0405	V	Frontle on out	4.0	Mechanical	methanol : ethanol (8:2)	60	00.00	4 =	V
2165	Yes Yes	Further cut	1.0g	shaking Ultrasonic	isooctane methanol: ethanol 80:20	min. 30 min	60 °C	4.5 4.5	Yes
2217	Yes	Used as received Further cut	0.9986 g 1g	Ultrasonic	Methanol:Ethanol(80:20)	60 min	60 60°C	5.6	No Yes
2232	168	Futther cut	ıg	Ultrasoriic	The mixture solution of	00 111111	00 C	5.0	165
2241	Yes	Further cut	0.5g	Ultrasonic	MeOH and Ethanol(4:1).	60 min	60 °C.	4.0-4.5.	No
			0.09	Mechanical			00 0.		
				Shaking /					
2247	Yes	Further cut		Ultrasonic	80:20 (MeOH:EtOH)	60 min	60 °C	4.5	No
2265									
	.,				methanol/ethanol mixture		00.00		
2271	Yes	Further cut	0.5g	Ultrasonic	(80/20 in volume).	60 min	60 °C	4.5	No
2284	Yes	Further cut	1g	Ultrasonic	Methanol: ethanol =4:1	1h	60 60°C	4.5	Yes
2300	Yes	Further cut	1 gram.	Ultrasonic	Methanol.	60 min	60°C	4.5	No
2301	No	Further cut	1 g,	Ultrasonic Mechanical	Methanol/Ethanol	60 min	70c	5.6	Yes
2310	Yes	Further cut	1	Mecnanical Shaking	Hexane	60	60	4.5-5.0	Yes
2311	Yes	Further cut	0.5	Ultrasonic	Methanol + Ethanol (80:20)	60	60	4.5	No
2320	Yes	Further cut	0.5g	Ultrasonic	Methanol:Ethanol (80:20)	60min	60°C	4.5	Yes
2326	Yes	Further cut	1gm	Ultrasonic	Methanol Extraction	60 min	60°C	4.5	Yes
2330	No	Further cut	0.50g	Ultrasonic	Ethanol/Methanol	60 min	60 C	4.5	Yes
2350	No	Further cut	1 g	Ultrasonic	Methanol : Ethanol (8:2)	60 min	60 °C	4.5	No
2352	Yes	Further cut	1.0g	Ultrasonic	methanol & ethanol	60min	60°C	4.5	Yes
2357									
2358	Yes	Used as received	1.0	Ultrasonic	Ethanol/Methanol mixture	60	60	NA	Yes
2363	Yes	Further cut	2.5g	Ultrasonic	Methanol: Ethanol=4:1	60 min	60 °C	4.5	No
					20 mL methanol-ethanol				
2365	Yes	Further cut	1.0g	Ultrasonic	mixture	60min	60 °C	4.5	Yes
2366	No	Further cut	1g	Ultrasonic	//00040 - No and I am all a and I		2222		No
2270	Voc	Curther out	1 ~	Liltracania	#22810 ethanol/methanol 1:4. #22811 ethanol	60 min	60°C /	4.5	Vaa
2370 2373	Yes Yes	Further cut Further cut	1 g 1.0g	Ultrasonic Ultrasonic	n-Hexane	60 min 1h	room 40°C	4.5 4.5	Yes No
2375	Yes	Further cut	0.5 gram	Ultrasonic	Methanol/Ethanol	60 min	60 C	4.5	Yes
2010	163	i ditilei cut	0.5 grain	Mechanical	Wethanol/Ethanol	00 111111	00 0	4.0	163
2378	Yes	Used as received	0.5g	Shaking	N-Hexane	60min	60 °C	4.5	Yes
2379	Yes	Further cut	1 g	Ultrasonic	MeOH :EtOH 80:20 V/V	60 min	60 C	4.5	Yes
			<u>J</u>		• •	60			
2380	Yes	Further cut	1.0 g	Ultrasonic	Methanol & Ethanol Mixture	Minute	60 °C	5.8	Yes
2382	Yes	Further cut	1.0g	Ultrasonic	Hexane	60min	60 °C	4.5	Yes
			4		Methanol/Ethanol (80/20		00.05	4.5	
2386	Yes	Used as received	1 g	Ultrasonic	V/V)	60 min	60 °C	4,5	No
2415	Yes	Used as received	0.5	Ultrasonic	MeOH:EtOH (8:2 v/v)	60 min	60° C	4.5	Yes
2425	Yes	Further cut	0.5g	Ultrasonic	80:20 (Methanol: Ethanol)	60 min	60° C	N/A	Yes
2426	Yes	Further cut	0.5 gram	Ultrasonic	Methanol (Ethanol Mixture) Sodium carbamate in	oo min	60°C	4.5	No
2449	Yes	Further cut	1 GRAM	Ultrasonic	methanol	60 min	70 C	4.5	Yes
		. aranor out	· Or totalvi	Thermal		00 mm	, , , ,	1.0	. 55
2453	Yes	Further cut	±1g	Desorption					
2459	Yes	Further grinded	1.00 gm	Ultrasonic	Methanol:Ethanol (80:20)	60min	60°C	4.5	No
2482	Yes	Used as received	0,5	Ultrasonic	Methanol:Ethanol 80:20	60	60		No
2515	Yes	Used as received	1gram	Ultrasonic	methanol/ethanol (80/20)	1hours	60 °C	4.5	No
2522	Yes	Used as received	1 g	Ultrasonic	isooctane	60 min	60 °C	4.5	Yes
2525	Yes	Used as received	1,0 g	Ultrasonic	Methanol/Ethanol (80:20)	60 min	60 °C	4,5	No
2549	Yes	Used as received	1.0 gm	Ultrasonic	Ethanol: Methanol	60	60	5.7	Yes
a	.,			Mechanical	80% methanol20% ethanol				
2553	Yes	Used as received	1g	Shaking	V/V	60 min	60 °C	4.5	Yes
2564	Voc	Hood on received	10	Mechanical	80:20 mix of	60	60 °C	15	Voc
2561 2569	Yes Yes	Used as received Further cut	1g 1gm	Shaking Ultrasonic	methanol:ethanol Methanol & Ethanol mixture	60 60 Min	60 °C	4.5	Yes Yes
2308	162	i ultiloi out	rgiii	JiliasUIIIC	Medianol & Ethanol mixture	OU WIIII	00 0		163

	ISO/IEC 17025		Sample			Extrac- tion	Extrac- tion	pH after adding	Aci- dified
1-1-	accre-	Sample	intake	Extraction	Fortunation as bound	time	temp	the	to pH
lab	dited	preparation	(g)	type	Extraction solvent	(min)	(°C)	buffer	4.5
2573	Yes	Used as received	1g	Ultrasonic	methanol/ethanol(4:1)	60 min	60°C	4.5	Yes
2582	Yes	Further cut	1 gram	Ultrasonic	Acetone	60 min	room	4.5	No
2590	Yes	Used as received	1g	Ultrasonic	meoh:etoh 80:20	60 min	60°C		Yes
2591	No	Further cut	1.0 gram	Ultrasonic	MeOH/EtOH 80/20	60 min	60°C		No
2649	Yes	Further cut	1 g	Ultrasonic	n-Hexane	1 hour	70	4.5	Yes
	.,			Mechanical					.,
2665	Yes	Used as received	0.5g	Shaking	Ethanol, Hexane	960	22	4	Yes
2666	Yes	Further cut	1	Ultrasonic	methanol/ethanol	60	60		Yes
2668	Yes	Further cut	0.5 gms	Ultrasonic	Ethanol:Methanol	60 min	60C	4.5	Yes
2675	No	Used as received	1,0	Ultrasonic	Ethanol/acetic acid 95:5	60	60		No
2678									
2743									
2820	Yes	Used as received	1 g	Ultrasonic	methanol/ethanol	60	50		Yes
2826	Yes	Used as received	0.5 g	Ultrasonic	Methanol: Ethanol (80:20)	1 hour	60°C	4.5	No
						60			
2827	Yes	Further cut	0.5g	Ultrasonic	Methanol/Ethanol	mins	60 °C	5.4	Yes
2864									
2910	Yes	Used as received	2.6	Soxhlet	Isooctane	60	60	4.52	Yes
2960	Yes	Used as received	0.5	Stirrer	Methanol/Ethanol	1h	60	4.5	No
2977									
					Methanol-Ethanol mixture of	>120			
3003	Yes	Further grinded	2.5 gram	Ultrasonic	80/20 ratio	min	60	4.5	No
				Mechanical					
3100	Yes	Further cut	0.5g	Shaking	Methyl ethyl alcohol	60min	60°C	4.48	Yes
3116	Yes	Used as received	0.5 gram	Ultrasonic	methanol/ethanol (80/20 v/v)	1h	60 °C	4.5	No
3149	Yes	Used as received	1	Ultrasonic	Methanol/Ehanol 80/20	60	60		
3154	Yes	Used as received	0,6	Ultrasonic	Methanol	60 min	60 °C	4,5	No
3172	Yes								
3176	Yes	Used as received	1,0	Ultrasonic	MEOH/HCI	30	room	4,5	Yes
3185	Yes	Further cut	1gram	Ultrasonic	methanol:ethanol=4:1	60 min	60°C	6.52	No
3197	Yes	Further cut	0,5 g	Ultrasonic	Methanol/Ethanol (80:20)	60 min	60 C	4,5	No
3210	Yes	Used as received	1	Ultrasonic	MeOH/EtOH (80/20)	60	60		No
3214	Yes	Further cut	1 g	Ultrasonic	Methanol:Ethanol=4:1	60 min	60°C	4.5	Yes
3218	Yes	Used as received	0.5g	Ultrasonic	n-hexane	60 min	60°C	4.5	Yes
3228	Yes	Further cut	0.5	Ultrasonic	isooctane	60	60	4.5	Yes
3230									
3237	Yes	Further cut	0,5	Ultrasonic	ısooctane	60	60	na	No
3246	Yes	Used as received	1.00a	Ultrasonic	Methanol: ethanol = 8:2	1h	60°C	4.5	No

# **APPENDIX 4**

# Number of participants per country

- 4 labs in BANGLADESH
- 1 lab in BRAZIL
- 1 lab in CAMBODIA
- 1 lab in FRANCE
- 9 labs in GERMANY
- 3 labs in HONG KONG
- 1 lab in HUNGARY
- 8 labs in INDIA
- 2 labs in INDONESIA
- 7 labs in ITALY
- 1 lab in KOREA, Republic of
- 1 lab in MAURITIUS
- 1 lab in MOROCCO
- 20 labs in P.R. of CHINA
- 4 labs in PAKISTAN
- 1 lab in PORTUGAL
- 1 lab in SINGAPORE
- 1 lab in SPAIN
- 3 labs in SRI LANKA
- 3 labs in TAIWAN
- 1 lab in THAILAND
- 1 lab in TUNISIA
- 4 labs in TURKEY
- 1 lab in U.S.A.
- 1 lab in UNITED KINGDOM
- 4 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 D(0.01) = outlier in Grubbs' outlier test D(0.05) = straggler in Grubbs' outlier test D(0.05) = outlier in Double Grubbs' outlier test D(0.05) = straggler in Double Grubbs' outlier test

R(0.01) = outlier in Rosner's outlier test R(0.05) = straggler in Rosner's outlier test

E = calculation difference between reported test result and result calculated by iis

W = test result withdrawn on request of participant ex = test result excluded from statistical evaluation

n.a. = not applicable
n.e. = not evaluated
n.d. = not detected
fr. = first reported

#### Literature

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