Results of Proficiency Test AZO Dyes in Textile March 2021

Organized by: Institute for Interlaboratory Studies

Spijkenisse, the Netherlands

Author: ing. A. Ouwerkerk

Correctors: ing. A.S. Noordman-de Neef & ing. R.J. Starink

Report: iis21T04

July 2021

CONTENTS

1	INTRODUCTION	. 3
2	SET UP	3
2.1	ACCREDITATION	3
2.2	PROTOCOL	3
2.3	CONFIDENTIALITY STATEMENT	3
2.4	SAMPLES	4
2.5	ANALYZES	5
3	RESULTS	6
3.1	STATISTICS	7
3.2	GRAPHICS	8
3.3	Z-SCORES	8
4	EVALUATION	9
4.1	EVALUATION PER SAMPLE AND PER COMPONENT	9
4.2	PERFORMANCE EVALUATION FOR THE GROUP OF LABORATORIES	10
4.3	COMPARISON OF PROFICIENCY TEST OF MARCH 2021 WITH PREVIOUS PTS	10
4.4	EVALUATION OF THE ANALYTICAL DETAILS	11
5	DISCUSSION	12
6	CONCLUSION	12
	ndices:	
1.	Data, statistical and graphic results	
2.	Other reported aromatic amines	
3.	Analytical details	
4.	Number of participants per country	
5.	Abbreviations and literature	36

1 Introduction

Since 1997 the Institute for Interlaboratory Studies (iis) organizes a proficiency test for the analysis of banned aromatic amines from AZO Dyes in Textile. During the annual proficiency testing program 2020/2021 it was decided to continue the proficiency test for the analysis of banned aromatic amines derived from AZO Dyes in Textile.

In this interlaboratory study 155 laboratories in 31 different countries registered for participation. See appendix 4 for the number of participants per country. In this report the results of the AZO Dyes 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 both positive on banned aromatic amines derived from AZO Dyes of approximately 3 grams each. The first sample is a brown acrylic textile labelled #21550 and the second sample is a pink polyester textile labelled #21551. The participants were requested to report rounded and unrounded test results. The unrounded test results were preferably used for statistical evaluation.

2.1 ACCREDITATION

The Institute for Interlaboratory Studies in Spijkenisse, the Netherlands, is accredited in agreement with ISO/IEC17043:2010 (R007), since January 2000, by the Dutch Accreditation Council (Raad voor Accreditatie). This PT falls under the accredited scope. This ensures strict adherence to protocols for sample preparation and statistical evaluation and 100% confidentiality of participant's data. Feedback from the participants on the reported data is encouraged and customer's satisfaction is measured on regular basis by sending out questionnaires.

2.2 PROTOCOL

The protocol followed in the organization of this proficiency test was the one as described for proficiency testing in the report 'iis Interlaboratory Studies: Protocol for the Organisation, Statistics and Evaluation' of June 2018 (iis-protocol, version 3.5). This protocol can be downloaded from 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 acrylic was selected which was dyed with Basic Brown 4 by a third party. A part of this batch was cut in small pieces. After homogenization the batch was divided over 190 subsamples in small bags of approximately 3 grams each and labelled #21550.

The homogeneity of the subsamples was checked by the determination of 2,4-Diaminotoluene according to test method EN14362-1 on eight stratified randomly selected subsamples.

	2,4-Diaminotoluene in mg/kg
sample #21550-1	54.2
sample #21550-2	59.3
sample #21550-3	56.5
sample #21550-4	50.1
sample #21550-5	58.6
sample #21550-6	57.1
sample #21550-7	61.2
sample #21550-8	55.5

Table 1: homogeneity test results of subsamples #21550

From the above test results the relative standard deviation was calculated and compared with 0.3 times the relative standard deviation derived from iis PTS 2004-2020 in agreement with the procedure of ISO13528, Annex B2 in the next table.

	2,4- Diaminotoluene
RSD (observed)	6.0%
reference method	iis PTS
0.3 x RSD (reference method)	7.5%

Table 2: evaluation of the relative standard deviation of subsamples #21550

The calculated relative standard deviation was in agreement with 0.3 times the relative standard deviation derived from iis PTS 2004-2020. Therefore, homogeneity of the subsamples was assumed.

For the second sample a batch of polyester was selected which was dyed with Solvent Red 1 by a third party. A part of this batch was cut in small pieces. After homogenization the batch was divided over 190 subsamples in small bags of approximately 3 grams each and labelled #21551.

The homogeneity of the subsamples was checked by the determination of o-Anisidine according to test method EN14362-1 on eight stratified randomly selected subsamples.

	o-Anisidine in mg/kg
sample #21551-1	101.4
sample #21551-2	103.9
sample #21551-3	103.2
sample #21551-4	97.3
sample #21551-5	94.4
sample #21551-6	103.8
sample #21551-7	102.8
sample #21551-8	98.7

Table 3: homogeneity test results of subsamples #21551

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.

	o-Anisidine in mg/kg
r (observed)	9.8
reference test method	ISO14362-1:17
0.3 x R (reference test method)	14.9

Table 4: evaluation of the repeatability of subsamples #21551

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 #21550 and one sample labelled #21551 was sent on March 3, 2021.

2.5 ANALYZES

The participants were asked to determine on sample #21550 and on sample #21551 the concentrations of the following aromatic amines:

4-Aminodiphenyl (CAS No. 92-67-1)

Benzidine (CAS No. 92-87-5)

- 4-Chloro-o-toluidine (CAS No. 95-69-2)
- 2-Naphtylamine (CAS No. 91-59-8)
- 2-Amino-4-nitrotoluene (CAS No. 99-55-8)
- 4-Chloraniline (CAS No. 106-47-8)
- 2,4-Diaminoanisol (CAS No. 615-05-4)
- 4,4'-Diaminodiphenylmethane (CAS No. 101-77-9)
- 3,3'-Dichlorobenzidine (CAS No. 91-94-1)
- 3,3'-Dimethoxybenzidine (CAS No. 119-90-4)
- 3,3'-Dimethylbenzidine (CAS No. 119-93-7)
- 3,3'-Dimethyl-4,4'-Diaminodiphenylmethane (CAS No. 838-88-0)
- p-Cresidine (CAS No. 120-71-8)

```
4,4'-Diamino-3,3'-dichlorodiphenylmethane (CAS No. 101-14-4)
```

4,4'-Diaminodiphenylether (CAS No. 101-80-4)

4,4'-Diaminodiphenylsulfide (CAS No. 139-65-1)

2,4-Diaminotoluene (CAS No. 95-80-7)

2,4,5-Trimethylaniline (CAS No. 137-17-7)

o-Anisidine (CAS No. 90-04-0)

2,4-Xylidine (CAS No. 95-68-1)

2,5-Xylidine (CAS No. 95-78-3)

2,6-Xylidine (CAS No. 87-62-7)

Total Xylidines

o-Aminoazotoluene (CAS No. 97-56-3)

o-Toluidine (CAS No. 95-53-4)

Sum of o-Aminoazotoluene and o-Toluidine

It was decided not to request p-Aminoazobenzene, CAS no. 60-09-3, because the samples were not positive for this component and to enable this determination more sample amount should be supplied. As it is never easy to obtain sample material it was therefore decided to remove this component from the list so that we can supply a lower sample amount to more participants.

To ensure homogeneity it was requested not to use less than 0.5 grams of the sample per determination. It was also requested to report if the laboratory was accredited to determine the reported components and to report some analytical details.

It was explicitly requested to treat the samples as if they were routine samples and to report the test results using the indicated units on the report form and not to round the test results, but report as much significant figures as possible. It was also requested not to report 'less than' test results, which are above the detection limit, because such test results 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 appendix 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 reanalysis). Additional or corrected test results are used for data analysis and original test results are placed under 'Remarks' in the test result tables in appendix 1. 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 Organization, 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 dataset 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 these with a factor of 2.8.

3.2 GRAPHICS

In order to visualise the data against the reproducibilities from literature, Gauss plots were made, using the sorted data for one determination (see appendix 1). On the Y-axis the reported 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, e.g. ISO reproducibilities, the z-scores were calculated using a target standard deviation. This results in an evaluation independent of the variation of this interlaboratory study.

The target standard deviation was calculated from the literature reproducibility by division with 2.8. In case no literature reproducibility was available, other target values were used, 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 samples. Seventeen 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 tests requested.

In total 150 participants reported 291 numerical test results. Observed were 30 outlying test results, which is 10.3%. 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 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. The abbreviations used in these tables are explained in appendix 5.

For the determination of Aromatic Amines derived from AZO colorants the ISO14362 method is considered to be the official test method. Two versions of ISO14362 were published in 2017. Part 1 of ISO14362 describes a method to detect certain aromatic amines that are banned. Part 3 of ISO14362 describes a method to detect 4-Aminoazobenzene. In both samples, 4-Aminoazobenzene was not present.

Regretfully, not for all listed Aromatic Amines precision data are available in ISO14362-1:17. Unfortunately, for both component 2,4-Diaminotoluene, which is present in sample #21550 and component o-Anisidine, which is present in sample #21551 no precision statement is mentioned. For the evaluation of both components the average of the reproducibilities mentioned in ISO14362-1:17 is used.

Sample #21550

<u>2,4-Diaminotoluene (CAS No. 95-80-7)</u>: The determination was problematic. Three statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is not in agreement with the requirements of ISO14362-1:2017.

Sample #21551

o-Anisidine (CAS No. 90-04-0): The determination was problematic for a number of laboratories. Twenty-seven statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the requirements of ISO14362-1:2017.

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 (or estimated) from the reference test method ISO14362-1 are compared in the next tables.

Component	unit	n	average	2.8 * sd	R(lit)
2,4-Diaminotoluene	mg/kg	140	47.4	32.6	21.5

Table 5: reproducibility of the aromatic amine in textile sample #21550

Component	unit	n	average	2.8 * sd	R(lit)
o-Anisidine	mg/kg	121	82.6	31.9	37.4

Table 6: reproducibility of the aromatic amine in textile sample #21551

Without further statistical calculations it can be concluded that the group of laboratories has difficulties with the analysis of 2,4-Diaminotoluene but has no problem with the analysis of o-Anisidine.

4.3 COMPARISON OF THE PROFICIENCY TEST OF MARCH 2021 WITH PREVIOUS PTS

	March 2021	March 2020	March 2019	March 2018	February 2017
Number of reporting laboratories	150	126	165	171	164
Number of test results	291	380	299	496	770
Number of statistical outliers	30	2	11	3	18
Percentage statistical outliers	10.3%	0.5%	3.7%	0.6%	2.3%

Table 7: comparison to previous proficiency tests

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

The performance of the determinations of the proficiency test was compared, expressed as relative standard deviations (uncertainties). The conclusions are given in the following table.

Component	March 2021	March 2020	March 2019	March 2018	2004 - 2017	target
4-Aminodiphenyl	n.e.	n.e.	n.e.	n.e.	18-36%	16%
Benzidine	n.e.	n.e.	n.e.	12%	15-35%	14%
4-Chloro-o-toluidine	n.e.	n.e.	n.e.	n.e.	24%	16%
2-Naphtylamine	n.e.	n.e.	n.e.	n.e.	27-41%	16%
4-Chloroaniline	n.e.	n.e.	n.e.	n.e.	27%	16%
2,4-Diaminoanisol	n.e.	n.e.	n.e.	n.e.	24-52%	16%
4,4'-Diaminodiphenylmethane	n.e.	n.e.	n.e.	n.e.	21%	15%
3,3'-Dimethoxybenzidine	n.e.	11%	11%	12%	16-31%	13%

page 10 of 36 AZO Dyes in Textile: iis21T04

Component	March 2021	March 2020	March 2019	March 2018	2004 - 2017	target
3,3'-Dimethylbenzidine	n.e.	n.e.	n.e.	n.e.	15-36%	18%
4,4'-Diamino-3,3'- Dichlorodiphenylmethane	n.e.	n.e.	n.e.	n.e.	20-35%	16%
4,4'-Diaminodiphenylether	n.e.	n.e.	n.e.	n.e.	15%	16%
4,4'-Diaminodiphenylsulfide	n.e.	n.e.	n.e.	n.e.	18-26%	16%
2,4-Diaminotoluene	25%	n.e.	n.e.	n.e.	n.e.	21%
o-Anisidine	14%	n.e.	n.e.	n.e.	n.e.	37%
2,4-Xylidine	n.e.	n.e.	26%	n.e.	19%	16%
o-Aminoazotoluene *)	n.e.	n.e.	n.e.	n.e.	n.e.	22%
o-Toluidine *)	n.e.	n.e.	n.e.	n.e.	19-38%	22%
Sum of o-aminoazotoluene and o-Toluidine *)	n.e.	35%	n.e.	n.e.	34%	22%

Table 8: development of uncertainties of aromatic amines in textile samples over the years

Aromatic amines not mentioned in table 8 are not determined in a PT of iis yet.

4.4 EVALUATION OF THE ANALYTICAL DETAILS

For this PT some questions were asked about accreditation and about sample details such as sample intake, sample preparation and the use of a diatomaceous earth column.

- One hundred and thirty-two participants (85%) mentioned that they are accredited for determination of banned AZO Dyes in Textile. Eleven participants mentioned that the laboratory is not accredited for the determination of aromatic amines in textiles.
- 85% of the participants used 0.5 grams or more for testing.
- The samples were used as received by 48% of the participants and further cut or grinded by 42%.
- 3% of the participants used the ASE technique to release/extract the analyte(s), 29% Soxhlet, 14% Mechanical Shaking, 3% Thermal desorption, 6% Ultrasonic and 30% another technique.
- Xylene, t-Butyl methyl ether and citrate buffer were the most reported solvents used to release the analyte(s).
- A quarter of the participants reported an extraction time of 30 minutes or 60 minutes. An extraction time of 15-20 minutes was reported by 5% of the participants, 20% reported 40-50 minutes and 9% reported an extraction time of more than 60 minutes.
- More than half (62%) of the participants reported and extraction temperature of 70°C, about 26% an extraction temperature above 100°C.
- About the use of diatomaceous earth column as prescribed in ISO14362-1 more of the half of the participants (64%) reported to have used this column. Twenty-eight participants did not use this column and seven participants reported to have used a different test method.

No effect was observed on the averages or variation between reported test results.

5 DISCUSSION

Almost all reporting participants were able to detect 2,4-Diaminotoluene in sample #21550 and o-Anisidine in sample #21551.

When the results of this interlaboratory study were compared to the Ecolabelling Standards and Requirements for Textiles in EU and with the similar Bluesign® BSSL (Table 9), it was noticed that not all participants would make identical decisions about the acceptability of the textiles for the determined components.

Ecolabel	baby clothes	in direct skin contact	no direct skin contact
Bluesign® BSSL <20 mg/kg		<20 mg/kg	<20 mg/kg
Oeko-Tex 100	<20 mg/kg	<20 mg/kg	<20 mg/kg

Table 9: Bluesign® BSSL and Ecolabelling Standards and Requirements for Textiles in EU

Almost all reporting laboratories would have rejected sample #21550 for all categories, except seven participants. Almost all reporting laboratories would have rejected sample#21551 for all categories, except twelve participants.

6 CONCLUSION

Although it can be concluded that the majority of the participants has no problem with detecting 2,4-Diaminotoluene and o-Anisidine in the samples of this PT, each participating laboratory will have to evaluate its performance in this study and decide about any corrective actions if necessary. Therefore, participation on a regular basis in this scheme could be helpful to improve the performance and thus increase of the quality of the analytical results.

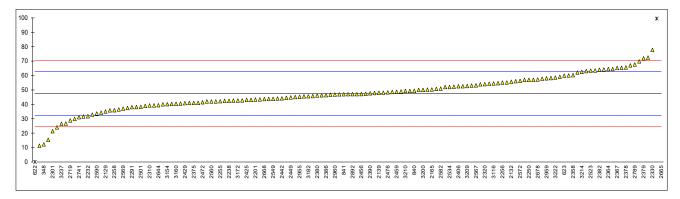
APPENDIX 1

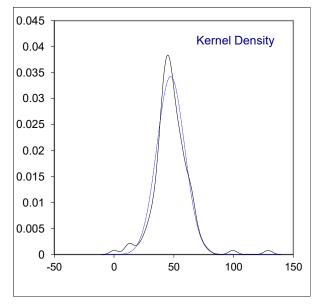
Determination of 2,4-Diaminotoluene (CAS No. 95-80-7) in sample #21550; results in mg/kg

	•	-	•		in sample #21550; results in mg/kg
lab	method	value	mark	z(targ)	remarks
	ISO14362-1	47.83		0.06	T
	ISO14362-1	43.38	С	-0.52	First reported 15.361504
	EN14362-1	11.3		-4.71	
	PE-S930-LABE-005	12.2		-4.59 1.12	
551	ISO14362-1	56.0		1.12	
	ISO14362-1	0.08	R(0.05)	 -6.17	
		59.864	11(0.00)	1.63	
	ISO14362-1	49.4		0.26	
	ISO14362-1	46.98		-0.05	
2102		99.46	R(0.01)	6.79	
	ISO14362-1	47.17		-0.03	
	EN14362-1	35.0		-1.62	
	EN14362-1	55.6466		1.08	
	EN14362-1	54.61		0.94	
	EN14362-1 EN14362-1	48 50.3		0.08 0.38	
	EN14362-1	46.99		-0.05	
	EN14362-1	52.5		0.67	
	ISO14362-1	43.25		-0.54	
	EN14362-1	23.97		-3.06	
2218	EN14362-1	26.71		-2.70	
	EN14362-1	31.7	С	-2.05	First reported 16.1
2236	EN144000 1	40.05			
	EN14362-1	42.35		-0.66	
	EN14362-1	42.74		-0.61	
	EN14362-1 EN14362-1	57 42.10		1.25 -0.69	
	ISO14362-1	55.07		1.00	
	ISO14362-1	35.89		-1.50	
	EN14362-1	40.9		-0.85	
	ISO14362-1	46.9		-0.06	
2286	ISO14362-1	63.02		2.04	
	ISO14362-1	40		-0.96	
	ISO14362-1	57.8		1.36	
	ISO14362-1	38		-1.23	
2293	EN14362-1	 42		-0.70	
	ISO14362-1	42 <5		-0.70 <-5.53	Possibly a false negative test result?
	ISO14362-1	21.315		-3.40	1 obbibly a falloc frogulave tool result:
	EN14362-1	39.2		-1.07	
	ISO14362-1	40.518		-0.90	
	EN14362-1	37.40		-1.30	
	EN14362-1	39.23		-1.07	
	ISO14362-1	53.978		0.86	
	ISO14362-1	77.80		3.97	
2350	ISO14362-1	57		1.25	
	EN14362-1	64.5		2.23	
	ISO14362-1	65.4		2.35	
	ISO14362-1	60.2		1.67	
	EN14362-1	64.4		2.22	
	ISO14362-1	62.0		1.91	
	EN14362-1	57		1.25	
	ISO14362-1	65.2		2.32	
	ISO14362-1 ISO14362-1	32.79 29.90		-1.91 -2.28	
	ISO14362-1	64.2		-2.20 2.19	
	ISO14362-1	41		-0.83	
	ISO14362-1	65.5		2.36	
2379	ISO14362-1	71.9036	С	3.20	First reported 84.4499
	ISO14362-1	46.1		-0.17	
	ISO14362-1	44.00		-0.44	
	ISO14362-1	64.0		2.17	
	EN14362-1	46.3		-0.14	
	EN14362-1	47.61 52.40		0.03 0.66	
	ISO14362-1 ISO14362-1	52.49 43.0		-0.57	
	ISO14362-1	50.19		0.36	
	EN14362-1	40.8		-0.86	
	ISO14362-1	44.09		-0.43	
2449		44.78		-0.34	
2453	ISO14362-1	53.85		0.84	
2456	ISO14362-1	47.05	С	-0.04	First reported 93.61

lah	matha d	value	maul.	=/towa\	vo montes
2459	method ISO14362-1	value 48.723	mark	z(targ) 0.17	remarks
	ISO14362-1	41.40		-0.78	
	EN14362-1	47.01		-0.05	
	ISO14362-1	48.3		0.12	
	ISO14362-1	38.10		-1.21	
	ISO14362-1	48.87		0.19	
	In house	52.0		0.60	
	ISO14362-1	46.21		-0.15	
2501	ISO14362-1	38.21		-1.20	
	ISO14362-1	42.532		-0.63	
	EN14362-1	44.53		-0.37	
	ISO14362-1	63.37		2.08	
2528	EN14362-1	59.10		1.53	
	ISO14362-1	52	С	0.60	First reported 101.6
	EN14362-1	43.8		-0.47	•
2553	EN14362-1	36.45		-1.43	
2560		42		-0.70	
2561	ISO14362-1	45.7		-0.22	
2565	ISO14362-1	38.93		-1.10	
2567	EN14362-1	53.1		0.74	
2569	ISO14362-1	37		-1.36	
2572	EN14362-1	56.3		1.16	
2582	ISO14362-1	50.89		0.46	
2590	EN14362-1	33.69		-1.79	
2591	ISO14362-1	not detected <4		<-5.66	Possibly a false negative test result?
2605	ISO14362-1	48.02		0.08	•
2609	EN14362-1	69.8		2.92	
2618	EN14362-1	42.30		-0.66	
2638	ISO14362-1	15.40		-4.17	
2643	KS K0147	58.19		1.41	
2644		39.36		-1.05	
2665	EN14362-1	129.0	R(0.01)	10.65	
2668	EN14362-1	43.65	, ,	-0.49	
2674	EN14362-1	52.2		0.63	
2678	ISO14362-1	57.20		1.28	
2689	EN14362-1	42		-0.70	
2703					
2719	ISO14362-1	28.8		-2.43	
2734					
2741	EN14362-1	31.034		-2.13	
2743					
2773	EN14362-1	43.0		-0.57	
2789	ISO14362-1	67.66		2.64	
	ISO14362-1	50		0.34	
2823	ISO14362-1	31.536		-2.07	
	ISO14362-1	55.13		1.01	
2827	EN14362-1	40.23		-0.93	
	ISO14362-1	49.27		0.24	
2864	EN14362-1	not detected			Possily a false negative test result? D.L. not reported.
2866	EN14362-1	63.45		2.10	
2867	EN14362-1	50.7		0.43	
2892	ISO14362-1	47.000		-0.05	
2948	ISO14362-1	35.837		-1.51	
2953					
2955	EN14362-1	45.2		-0.29	
2959	EN14362-1	58		1.38	
2960	ISO14362-1	46.8		-0.08	
3110	EN14362-1	53.01		0.73	
3116	ISO14362-1	54.43		0.92	
3118	ISO14362-1	48.5		0.14	
3134	EN14362-1	60.0	С	1.64	First reported 32
3149	ISO14362-1	34.2		-1.72	·
3153	ISO14362-1	45.5		-0.25	
3154	EN14362-1	40.062		-0.96	
3160	ISO14362-1	40.371		-0.92	
3172	ISO14362-1	42.6269		-0.62	
3176	ISO14362-1	67.006		2.56	
	ISO14362-1	45.55		-0.24	
	EN14362-1	45.00		-0.31	
3190	EN14362-1	46.65		-0.10	
3192					
	ISO14362-1	50.0		0.34	
	ISO14362-1	52.71		0.69	
	In house	49.24		0.24	
	ISO14362-1	62.52		1.97	
	EN14362-1	43.78		-0.47	
3222	ISO14362-1	58.48		1.45	
3228	EN14362-1	54.3		0.90	

lab	method	value	mark	z(targ)	remarks
3237	ISO14362-1	26.5		-2.73	3
3248	ISO14362-1	41		-0.83	3
8030	ISO14362-1	72.4026		3.26	
	normality	OK			
	n	140			
	outliers	3			
	mean (n)	47.393			
	st.dev. (n)	11.6476	RSD = 25%		
	R(calc.)	32.613			
	st.dev.(ISO14362-1:17)	7.6642			
	R(ISO14362-1:17)	21.460			



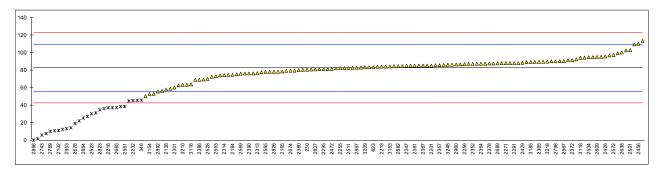


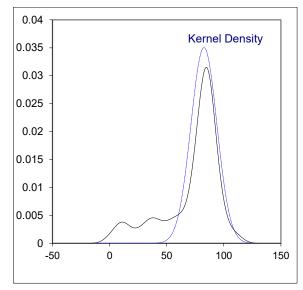
Determination of o-Anisidine (CAS No. 90-04-0) in sample #21551; results in mg/kg

Mail	lab	Method	value	mark	z(tora)	romarks
230 S014362-1 50 344827 -0.17 348 infocuse 45 5 5 18 18 18 18 18 18	210		7 64	mark R(0.05)	z(targ) -5.61	remarks
339 Binlasse				11(0.00)		
348 Inhouse 45.7 R(0.05) -2.76 521 ISO14362-1 14.0 R(0.05) -5.14 551 ISO14362-1 86.46 R(0.05) -5.14 551 ISO14362-1 86.46 R(0.05) -5.14 552 ISO14362-1 86.46 R(0.05) -6.06 522 ISO14362-1 85.48 R(0.05) -6.06 523 ISO14362-1 85.49 R(0.05) -5.36 521 ISO14362-1 10.94 R(0.05) -2.82 521 ISO14362-1 10.2.5 -1.49 522 ISO14362-1 10.2.5 -1.49 523 ISO14362-1 10.2.5 -1.49 524 ISO14362-1 10.2.5 -1.49 525 ISO14362-1 10.2.5 -1.49 526 ISO14362-1 10.2.5 -1.49 527 ISO14362-1 10.2.5 -1.49 528 ISO14362-1 10.2.5 -1.49 529 ISO14362-1						Possibly a false negative test result?
15014362-1	348	Inhouse	45.7	R(0.05)	-2.76	· -
Sect SicolataBe2-1 1.68				R(0.05)		
823 ISO14382-1 83.284 0.05 840 ISO14382-1 58.82 -1.50 841 ISO14382-1 58.82				D(0.05)		
840 ISO14362-1 62.6 1.50				K(0.05)		
18014362-1						
2102						
2112 EM14362-1	2102		10.94	R(0.05)		
2132 ENH4362-1				R(0.05)		
2138 ENI4362-1 57.83 -1.85 2139 ENI4362-1 78.4 -0.31 2140 ENI4362-1 78.4 -0.31 2151 ENI4362-1 74.5 -0.61 2161 ENI4362-1 74.5 -0.61 2170 ENI4362-1 74.5 -0.61 2181 ENI4362-1 74.5 -0.61 2182 ENI4362-1 85.11 -0.19 2182 ENI4362-1 85.11 -0.19 2182 ENI4362-1 85.11 -0.19 2182 ENI4362-1 85.11 -0.19 2182 ENI4362-1 45.3 R(0.05) -2.78 2232 ENI4362-1 83.93 R(0.05) -2.78 2238 ENI4362-1 83.69 -0.04 2247 ENI4362-1 82.05 -0.04 2250 ENI4362-1 82.05 -0.04 2250 ENI4362-1 82.05 -0.04 2251 ENI4362-1 82.05 -0.04 2252 ENI4362-1 82.05 -0.04 2253 ENI4362-1 87.9 -0.40 2261 ENI4362-1 87.9 -0.40 2271 ISO14362-1 85 -0.18 2289 ISO14362-1 85 -0.18 2290 ISO14362-1 85 -0.18 2290 ISO14362-1 86 -0.17 2291 ENI4362-1 86 -0.18 2290 ISO14362-1 86 -0.18 2290 ISO14362-1 87.9 -0.40 2291 ENI4362-1 88 -0.40 2291 ENI4362-1 88 -0.40 2291 ISO14362-1 88 -0.40 2292 ISO14362-1 88 -0.40 2291 ISO14362-1 88 -0.40 2202 ENI4362-1 88 -0.40 2211 ISO14362-1 89 -0.17 2211 ISO14362-1 89 -0.17 2311 ISO14362-1 89 -0.17 2311 ISO14362-1 89 -0.17 2311 ISO14362-1 89 -0.17 2313 ENI4362-1 80 -0.17 2313 ENI4362-1 80 -0.17 2314 ENI4362-1 85 -0.18 2315 ENI4362-1 85 -0.18 2316 ENI4362-1 85 -0.18 2317 ISO14362-1 85 -0.18 2320 ISO14362-1 85 -0.18 2320 ISO14362-1 86 -0.17 2331 ISO14362-1 86 -0.18 2342 ISO14362-1 86 -0.19 2352 ENI4362-1 86 -0.19 2353 ISO14362-1 86 -0.19 2354 ISO14362-1 86 -0.19 2355 ISO14362-1 86 -0.19 2356 ISO14362-1 86 -0.19 2357 ISO14362-1 86 -0.19 2358 ISO14362-1 86 -0.19 2358 ISO14362-1 86 -0.19 2358 ISO14362-1 86 -0.19 2358						
2139 EN14362-1 53 - 2-22 156 EN14362-1 94.99 0.93 1210 EN14362-1 94.99 0.93 1211 EN14362-1 94.99 0.93 1221 EN14362-1 95.11 0.19 1221 EN14362-1 95.11 0.19 1221 EN14362-1 95.95 R(0.05) -3-42 1221 EN14362-1 95.95 R(0.05) -3-42 1222 EN14362-1 95.95 R(0.05) -3-42 1223 EN14362-1 95.95 R(0.05) -3-42 1223 EN14362-1 95.95 R(0.05) -3-42 1223 EN14362-1 95.95 R(0.05) -3-42 1224 EN14362-1 95.95 R(0.05) -3-42 1225 EN14362-1 95.00 0.03 1226 EN14362-1 95.00 0.04 1226 EN14362-1 95.00 0.05 1227 ISO14362-1 95.00 0.05 1228 ISO14362-1 95.00 0.05 1229 ISO14362-1 95.00 0.05 1229 ISO14362-1 95.2 0.00 1229 ISO14362-1 95.2 0.00 1229 ISO14362-1 95.2 0.00 1230 ISO14362-1 95.2 0.00 1231 ISO14362-1 95.2 0.04 1232 EN14362-1 95.2 0.05 1231 ISO14362-1 95.2 0.05 1231 ISO14362-1 95.2 0.05 1231 ISO14362-1 95.2 0.05 1231 ISO14362-1 95.0 0.05 1231 ISO14362-1 95.4 0.05 1231 ISO14362-1 95.4 0.05 1231 ISO14362-1 95.4 0.05 1231 IS						
2165 EN14362-1 74.5 0.93 2170 EN14362-1 74.5 0.93 2184 EN14362-1 74.5 0.61 2191 SON4362-1 83.93 2101 SON4362-1 83.93 2118 EN14362-1 83.93 2118 EN14362-1 83.93 2118 EN14362-1 45.3 R(0.05) 2.79 2232 EN14362-1 87.15 2232 EN14362-1 87.15 2233 EN14362-1 87.0 2238 EN14362-1 87.0 2250 EN14362-1 88.0 2250 EN14362-1 88.0 2250 EN14362-1 88.0 2260 EN14362-1 88.0 2271 EN14362-1 88.0 2281 SON4362-1 88.0 2282 EN14362-1 88.0 2283 EN14362-1 88.0 2284 EN14362-1 88.0 2285 EN14362-1 88.0 2286 EN14362-1 88.0 2287 EN14362-1 88.0 2288 EN14362-1 88.0 238 EN14362-1 88.0 239 EN14362-1 88.0 240 EN14362-1 88.0 240 EN14362-1 88.0 241 EN14362-1 88.0 242 EN14362-1 88.0 243 EN14362-1 88.0 244 EN14362-1 88.0 245 EN14362-1 88.0 246 EN14362-1 88.0 247 EN14362-1 88.0 248 EN14362-1 88.0 249 EN14362-1 88.0 240 EN14362-1 88.0 240 EN14362-1 88.0 240 EN14362-1 88.0 241 EN14362-1 88.0 242 EN14362-1 88.0 243 EN14362-1 88.0 244 EN14362-1 88.0 245 EN14362-1 88.0 246 EN14362-1 88.0 247 EN14362-1 88.0 248 EN14362-1 88.0 249 EN14362-1 88.0 240 EN14362-1 88.0 241 EN14362-1 88.0 242 EN14362-1 88.0 243 EN14362-1 88.0 244 EN14362-1 88.0 245 EN14362-1 88.0 246 EN14362-1 88.0 247 EN14362-1 88.0 248 EN14362-1 88.0 249 EN14362-1 88.0 240 EN14362-1 88.0 241 EN14362-1 88.0 242 EN14362-1 88.0 243 EN14362-1 88.0 244 EN14362-1 88.0 245 EN14362-1 88.0 246 EN14362-1 88.0 247 EN14362-1 88.0 248 EN14362-1 88.0 249 EN14362-1 88.0 240 EN14362-1 88.0 241 EN14362-1 88.0 242 EN14362-1 88.0 243 EN14362-1 88.0 244 EN14362-1 88.0 245 EN14362-1 88.0 246 EN14362-1 88.0 247 EN14362-1 88.0 248 EN14362-1 88.0 249 EN14362-1 88.0 240 EN14362-1 88.0 241 EN14362-1 88.0 242 EN14362-1 88.0 243 EN14362-1 88.0 244 EN14362-1 88.0 245 EN14362-1 88.0 246 EN14362-1 88.0 247 EN14362-1 88.0 248 EN14362-1 88.0 249 EN14362-1 88.0 240 EN14362						
2194 EN14362-1						
SO14362-1	2170	EN14362-1	94.99			
2218 EN14362-1 83,93 0,10 2218 EN14362-1 45.3 R(0.05) -2.79						
2218 EN14362-1						
2236 EN14362-1				P(0.05)		
2236 BN14362-1 87.15 0.34 2247 EN14362-1 83.69 0.08 2255 EN14362-1 82.05 0.04 2255 EN14362-1 82.05 0.04 2256 EN14362-1 82.05 0.04 2258 EN14362-1 27.18 C,R(0.05) 4.15 First reported 12.03 2258 EN14362-1 87.9 0.40 2258 EN14362-1 87.9 0.40 2268 EN14362-1 87.9 0.40 2271 ISO14362-1 85 0.18 2289 ISO14362-1 85 0.18 2290 ISO14362-1 85 0.18 2291 ISO14362-1 88 8 0.40 2291 ISO14362-1 89 2 124 2291 ISO14362-1 81 0.040 2293 EN14362-1 81 0.040 2293 EN14362-1 81 0.040 2293 EN14362-1 81 0.040 2294 EN14362-1 81 0.040 2295 EN14362-1 81 0.040 2296 EN14362-1 81 0.040 2297 ISO14362-1 81 0.040 2301 EN14362-1 80.326 0.017 2310 EN14362-1 80.326 0.017 2312 EN14362-1 80.326 0.017 2313 EN14362-1 75.50 0.046 2314 EN14362-1 75.00 0.046 2314 EN14362-1 75.00 0.046 2315 EN14362-1 85 0.18 2320 EN14362-1 85 0.18 2321 EN14362-1 85 0.18 2322 EN14362-1 85 0.099 R(0.05) 3.48 2323 EN14362-1 85 0.18 2324 EN14362-1 85 0.18 2325 EN14362-1 85 0.18 2326 EN14362-1 85 0.18 2327 ISO14362-1 85 0.19 2328 ISO14362-1 85 0.18 2329 EN14362-1 85 0.18 2320 EN14362-1 85 0.18 2321 EN14362-1 85 0.18 2322 EN14362-1 85 0.18 2323 EN14362-1 85 0.18 2324 EN14362-1 85 0.18 2325 EN14362-1 85 0.02 2326 EN14362-1 85 0.02 2327 ISO14362-1 85 0.02 2328 ISO14362-1 85 0.02 2338 ISO14362-1 85 0.02 2339 ISO14362-1 85 0.02 2341 EN14362-1 85 0.02 2351 ISO14362-1 85 0.02 2362 EN14362-1 85 0.02 2371 ISO14362-1 85 0.02 2371 ISO14362-1 85 0.02 2372 ISO14362-1 85 0.02 2373 ISO14362-1 85 0.02 2374 ISO14362-1 85 0.02 2375 ISO14362-1 85 0.02 2376 ISO14362-1 85 0.02 2377 ISO14362-1 85 0.02 2378 ISO14362-1 85 0.02 2379 ISO14362-1 85 0.02 2370 ISO14362-1 85 0.02 2371 ISO14362-1 85 0.02 2371 ISO14362-1 85 0.02 2372 ISO14362-1 85 0.02 2373 ISO14362-1 85 0.02 2374 ISO14362-1 85 0.02 2375 ISO14362-1 85 0.02 2376 ISO14362-1 85 0.02 2377 ISO14362-1 85 0.02 2378 ISO14362-1 85 0.02 2379 ISO14						
2255 EN14382-1 83.69 0.08 2255 EN14382-1 82.05 0.04 2256 EN14382-1 82.05 0.04 2258 EN14382-1 27.18 C.R(0.05) 4.15 2258 EN14382-1 109.25 2.00 2271 ISO14382-1 87.9 0.40 2271 ISO14382-1 87.9 0.40 2271 ISO14382-1 87.9 0.40 2281 ISO14382-1 87.9 0.40 2281 ISO14382-1 88.0 0.18 2289 ISO14382-1 99.2 1.24 2291 ISO14382-1 99.2 1.24 2291 ISO14382-1 99.2 1.24 2291 ISO14382-1 91.2 0.64 2295 EN14362-1 91.2 0.64 2301 ISO14382-1 91.2 0.64 2311 ISO14382-1 91.2 0.64 2311 ISO14382-1 79.4 0.24 2311 ISO14382-1 79.4 0.24 2311 ISO14382-1 76.50 0.46 2312 EN14382-1 76.50 0.46 2313 EN14382-1 76.50 0.46 2314 EN14382-1 76.50 0.46 2320 ISO14382-1 85.0 0.21 2321 EN14382-1 85.0 0.21 2321 EN14382-1 85.0 0.21 2322 EN14382-1 85.0 0.21 2323 ISO14382-1 85.0 0.21 2324 EN14382-1 85.0 0.21 2325 EN14382-1 85.0 0.21 2326 EN14382-1 85.0 0.21 2327 ISO14382-1 85.0 0.22 2328 EN14382-1 87.0 0.33 2328 EN14382-1 85.0 0.22 2338 ISO14382-1 87.0 0.33 2350 EN14382-1 85.5 0.22 2366 EN14382-1 87.0 0.33 2375 ISO14382-1 88.5 0.22 2386 EN14382-1 88.5 0.22 2387 ISO14382-1 88.5 0.22 2388 ISO14382-1 88.5 0.22 2398 ISO14382-1 88.1 0.03 2308 ISO14382-1 88.5 0.22 2309 ISO14382-1 88.5 0.22 2318 ISO14382-1 88.1 0.03 2320 ISO14382-1 88.5 0.22 2331 ISO14382-1 88.5 0.22 2338 ISO14382-1 88.5 0.22 2339 ISO14382-1 88.1 0.03 2340 ISO14382-1 88.1 0.03 2350 EN14382-1 88.1 0.03 2371 ISO14382-1 88.1 0.03 2372 ISO14382-1 88.1 0.02 2373 ISO14382-1 88.1 0.02 2373 ISO14382-1 88.1 0.02 2373 ISO14382-1 88.1 0.02 2374 ISO14382-1 88.1 0.02 2375 ISO14382-1 88.1 0.02 2376 ISO14382-1 88.1 0.02 2377 ISO14382-1 88.1 0.02 2378 ISO14382-1 88.0 0.03 2380 ISO14382-1 88.0 0.03 2380 ISO14382-1 88.1 0.03 2390 EN14382-1 88.2 0.05 2390 EN14382-1 88.2 0.05 2390 EN14382-1 88.2 0.05 2391 ISO14382-1 88.2 0.05 2392 ISO14382-1 88.1 0.02 2393 ISO14382-1 88.1 0.03 2394 ISO14382-1 88.1 0.03 2395 ISO14382-1 88.1 0.03 2396 ISO14382-1 88.1 0.03 2397 ISO14382-1 88.1 0.03 2398 ISO14382-1 88.2 0.05 2398 ISO14382-1 88.2 0				. (0.00)		
2255 EN14362-1 87 0.33 2255 EN14362-1 86.68 0.31 2256 ISO14362-1 86.68 0.31 2258 ISO14362-1 109.25 2.00 2258 ISO14362-1 109.25 2.00 2258 ISO14362-1 63.18 -1.45 2268 ISO14362-1 63.18 -1.45 2271 ISO14362-1 63.18 -1.45 2280 ISO14362-1 88 0.40 2280 ISO14362-1 88 0.40 2291 ISO14362-1 88 0.40 2292 ISO14362-1 88 0.40 2293 ISO14362-1 89 0.40 2293 ISO14362-1 89 0.40 2301 ISO14362-1 89 0.40 2301 ISO14362-1 89 0.40 2301 ISO14362-1 80 0.31	2238					
2256 EN14362-1 82.05 -0.04 2256 ISO14362-1 27.18 C,R(0.05) 4.15 First reported 12.03 2256 EN14362-1 109.25 2.00 2271 ISO14362-1 87.9 0.40 2288 ISO14362-1 83.18 -1.45 2289 ISO14362-1 99.2 1.24 2291 ISO14362-1 99.2 1.24 2291 ISO14362-1 88 0.40 2293 ISO14362-1 81 -0.12 2295 EN14362-1 91.2 0.64 2301 ISO14362-1 91.2 0.64 2311 ISO14362-1 79.4 -0.24 2311 ISO14362-1 79.4 -0.24 2312 ISO14362-1 76.50 -0.63 2320 ISO14362-1 85 0.18 2330 ISO14362-1 85 0.18 2342 ISO14362-1 85 0.18 2356 EN14362-1 85 0.18 2356 EN14362-1 87.0 0.3						
2256 ISO14362-1 86.68 0.31 2258 ISO14362-1 109.25 2.00 2271 ISO14362-1 87.9 0.40 2271 ISO14362-1 63.18 -1.45 2286 ISO14362-1 85 0.18 2289 ISO14362-1 88 0.40 2291 ISO14362-1 88 0.40 2297 ISO14362-1 81 -0.12 2297 ISO14362-1 91.2 0.64 2301 ISO14362-1 91.2 0.64 2301 ISO14362-1 90.326 -0.17 2310 ISO14362-1 90.326 -0.17 2312 ISO14362-1 76.50 -0.46 2313 ISO14362-1 76.50 -0.46 2314 EN14382-1 74.12 -0.63 2320 ISO14362-1 85.5 0.18 2350 EN14362-1 36.09 R(0.05) -3.48 2350 EN14362-1 87.0 0.33 2351 ISO14362-1 85.5 0.22 <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td></tr<>						
2258 ISO14362-1 27.18						
2266 ENI4382-1 199.25 2.00				C.R(0.05)		First reported 12.03
2288 ISO14362-1				-, (-,,		
2289 SO14362-1 85 0.18 2290 SO14362-1 88 0.40 2291 SO14362-1 81 0.12 2292 SO14362-1 81 0.12 2293 SO14362-1 81 0.12 2297 SO14362-1 91.2 0.64 2301 SO14362-1 91.2 0.64 2310 SO14362-1 79.4 0.24 2311 SO14362-1 79.4 0.24 2311 SO14362-1 76.50 0.46 2312 SO14362-1 74.12 0.63 2313 SO14362-1 85.424 0.21 2320 SO14362-1 85.424 0.21 2330 SO14362-1 85.424 0.21 2330 SO14362-1 85.424 0.18 2347 SO14362-1 85.70 0.18 2350 EN14362-1 87.0 0.33 2352 EN14362-1 87.0 0.33 2352 EN14362-1 87.0 0.33 2354 SO14362-1 85.5 0.22 2356 SO14362-1 87.0 0.35 2366 EN14362-1 87.0 0.35 2366 EN14362-1 87.0 0.55 2366 EN14362-1 87.2 0.35 2366 EN14362-1 87.2 0.35 2366 EN14362-1 87.2 0.35 2367 SO14362-1 87.2 0.35 2368 SO14362-1 87.2 0.35 2370 SO14362-1 85.1 0.19 2370 SO14362-1 85.1 0.19 2371 SO14362-1 87.5 0.67 2373 SO14362-1 87.5 0.67 2373 SO14362-1 81 0.12 2376 SO14362-1 87.5 0.37 2378 SO14362-1 87.5 0.37 2379 SO14362-1 87.5 0.37 2380 SO14362-1 87.5 0.37 2390 SO14362-1 88.9 1.03 2390 EN14362-1 88.9 1.03 2	2271		87.9			
2290 SO14362-1 88						
2291 SO14362-1 88 0.40 2292 EN14362-1 81 -1.12 2295 EN14362-1 91.2 0.64 2301 SO14362-1 91.2 0.64 2301 SO14362-1 79.4 -0.24 2310 EN14362-1 78.4 -0.24 2311 SO14362-1 76.50 -0.46 2314 EN14362-1 74.12 -0.63 2320 SO14362-1 85.424 -0.21 2330 SO14362-1 85.424 -0.21 2330 SO14362-1 85.6 0.18 2350 EN14362-1 85.5 0.18 2352 EN14362-1 87.0 0.33 2352 EN14362-1 87.0 0.33 2352 EN14362-1 87.0 0.33 2354 EN14362-1 87.2 0.35 2364 EN14362-1 87.2 0.35 2365 SO14362-1 87.2 0.35 2366 SO14362-1 85.1 0.19 2370 SO14362-1 85.1 0.19 2370 SO14362-1 85.1 0.19 2370 SO14362-1 85.1 0.19 2371 SO14362-1 85.1 0.19 2372 SO14362-1 85.1 0.19 2372 SO14362-1 86.1 0.26 2373 SO14362-1 87.5 0.91 2375 SO14362-1 87.5 0.37 2376 SO14362-1 87.5 0.37 2377 SO14362-1 87.5 0.67 2378 SO14362-1 87.5 0.37 2379 SO14362-1 87.5 0.37 2379 SO14362-1 87.5 0.37 2379 SO14362-1 87.5 0.37 2379 SO14362-1 87.5 0.37 2380 SO14362-1 87.5 0.37 2381 SO14362-1 88.0 0.18 2382 SO14362-1 85.0 0.18 2382 SO14362-1 85.0 0.18 2382 SO14362-1 83.2 0.05 2386 EN14362-1 85.0 0.18 2380 SO14362-1 87.5 0.37 2379 SO14362-1 88.2 0.05 2380 SO14362-1 88.2 0.05 2381 SO14362-1 88.2 0.05 2382 SO14362-1 88.2 0.42 2425 SO14362-1 88.2 0.42 2426 SO14362-1 88.2 0.42 2426 SO14362-1 88.2 0.42 2427 SO14362-1 88.2 0.42 2428 SO14362-1 88.2 0.42 2429 EN14362-1 88.2 0.42 2429 EN14362-1 88.2 0.42 2429 EN14362-1 88.2 0.42 2420 SO14362-1 88.2 0.42 2421 SO14362-1 88.2 0.42 2422 SO14362-1 88.2 0.42 2423 SO14362-1 0.05 0.35 2424 SO14362-1 0.05 0.35 2425 EN14362-1 0.05 0.35 2426 EN14362-1 0.05 2427 EN14362-1 0.05 2428 EN14362-1 0.05 2429 EN143						
2295 EN14362-1 81 -0.12 2297 ISO14362-1 91.2 0.64 2301 ISO14362-1 60.031 -1.69 2310 EN14362-1 79.4 -0.24 2311 ISO14362-1 79.4 -0.24 2311 ISO14362-1 76.50 -0.46 2313 EN14362-1 76.50 -0.46 2314 EN14362-1 76.50 -0.46 2320 ISO14362-1 85.424 0.21 2320 ISO14362-1 85.424 0.21 2330 ISO14362-1 85.5 0.18 2330 ISO14362-1 85.0 0.18 2330 ISO14362-1 87.0 0.33 2352 EN14362-1 87.0 0.33 2352 EN14362-1 87.0 0.33 2354 EN14362-1 87.0 0.33 2364 EN14362-1 87.2 0.35 2365 ISO14362-1 87.2 0.35 2366 EN14362-1 87.2 0.35 2366 EN14362-1 90 0.55 2367 ISO14362-1 94.76 0.91 2370 ISO14362-1 94.76 0.91 2371 ISO14362-1 81 0.06 2373 ISO14362-1 81 0.06 2376 ISO14362-1 91.5 0.67 2373 ISO14362-1 81 0.09 2376 ISO14362-1 81 0.09 2377 ISO14362-1 81 0.09 2378 ISO14362-1 81 0.09 2379 ISO14362-1 81 0.09 2379 ISO14362-1 81 0.09 2379 ISO14362-1 81 0.09 2379 ISO14362-1 81 0.09 2380 ISO14362-1 81 0.09 2381 ISO14362-1 83.0 0.0 0.18 2382 ISO14362-1 85.0 0.0 0.18 2383 ISO14362-1 85.0 0.18 2380 ISO14362-1 81 0.09 2381 ISO14362-1 85.0 0.18 2390 EN14362-1 85.0 0.18 2390 EN14362-1 85.0 0.18 2390 EN14362-1 85.0 0.18 2406 ISO14362-1 83.2 0.05 2429 EN14362-1 88.2 0.42 2429 EN14362-1 88.2 0.42 2429 EN14362-1 88.2 0.42 2429 EN14362-1 88.2 0.42 2449 75.1 0.56 2456 ISO14362-1 88.2 0.42 2449 75.1 0.56						
2295 EN14382-1 81 -0.12 2297 ISO14382-1 60.031 -1.69 2310 EN14382-1 79.4 -0.24 2311 ISO14362-1 80.326 -0.17 2313 EN14362-1 76.50 -0.46 2314 EN14362-1 74.12 -0.63 2320 ISO14362-1 85.424 0.21 2330 ISO14362-1 85.424 0.21 2347 ISO14362-1 85 -4.53 2347 ISO14362-1 85 0.18 2352 EN14362-1 87.0 0.33 2352 EN14362-1 87.0 0.33 2354 ISO14362-1 87.2 0.35 2364 EN14362-1 87.2 0.35 2364 EN14362-1 87.2 0.35 2366 EN14362-1 89.3 0.50 2367 ISO14362-1 91.5 0.67 2372 ISO14362-1 94.76 0.91 2375 ISO14362-1 86.1 0.26 2376 <		100110021				
2310 SO14362-1 60.031 -1.69 2310 EN14362-1 79.4 -0.24 2311 SO14362-1 80.326 -0.17 2313 EN14362-1 76.50 -0.46 2320 ISO14362-1 85.424 0.21 2330 ISO14362-1 85.424 0.21 2330 ISO14362-1 85 S 0.18 2350 EN14362-1 85 0.18 2350 EN14362-1 85 0.18 2350 EN14362-1 87.0 0.33 2357 ISO14362-1 85.5 0.22 2358 ISO14362-1 86.8 -1.03 2366 EN14362-1 87.0 0.35 2366 EN14362-1 87.2 0.35 EN14362-1 87.5 EN14362-1 E		EN14362-1	81		-0.12	
2310 EN14362-1 79.4 -0.24	2297	ISO14362-1	91.2			
2311 ISO14362-1						
2313 EN14362-1 76.50 -0.46 2314 EN14362-1 74.12 -0.63 2320 ISO14362-1 85.424 0.21 2330 ISO14362-1 85 0.18 2347 ISO14362-1 85 0.18 2350 EN14362-1 87.0 0.33 2350 EN14362-1 87.0 0.22 2361 ISO14362-1 87.0 0.22 2371 ISO14362-1 87.0 0.22 2381 ISO14362-1 87.2 0.35 2362 EN14362-1 87.2 0.35 2363 EN14362-1 87.2 0.35 2364 EN14362-1 89.3 0.50 2365 ISO14362-1 89.3 0.50 2366 EN14362-1 90 0.55 2370 ISO14362-1 94.76 0.91 2370 ISO14362-1 91.5 0.67 2371 ISO14362-1 87.5 0.67 2372 ISO14362-1 81 0.26 2373 ISO14362-1 81 0.26 2374 ISO14362-1 81 0.26 2375 ISO14362-1 81 0.26 2375 ISO14362-1 81 0.26 2376 ISO14362-1 81 0.26 2377 ISO14362-1 81 0.26 2378 ISO14362-1 81 0.26 2379 ISO14362-1 81 0.26 2379 ISO14362-1 81 0.26 2370 ISO14362-1 81 0.26 2371 ISO14362-1 81 0.26 2372 ISO14362-1 81 0.26 2373 ISO14362-1 81 0.26 2374 ISO14362-1 81 0.26 2375 ISO14362-1 81 0.26 2376 ISO14362-1 81 0.026 2377 ISO14362-1 81 0.026 2380 ISO14362-1 83.2 0.05 2380 ISO14362-1 83.2 0.05 2380 ISO14362-1 83.2 0.05 2380 ISO14362-1 83.2 0.05 2380 ISO14362-1 88.2 0.05 2380 ISO14362-1 88.2 0.05 2380 ISO14362-1 88.2 0.05 2380 ISO14362-1 88.2 0.05 2429 EN14362-1 88.2 0.42 2420 ISO14362-1 88.2 0.42 2420 ISO14362-1 88.2 0.42 2421 ISO14362-1 88.2 0.42 2422 ISO14362-1 88.2 0.42 24242 ISO14362-1 88.2 0.42 24242 ISO14362-1 88.2 0.42 2425 ISO14362-1 88.2 0.42 2426 ISO14362-1 88.2 0.42 2427 ISO14362-1 88.2 0.42 2428 ISO14362-1 88.2 0.42 2429 EN14362-1 88.2 0.42 2429 EN14362-1 88.2 0.42 2420 ISO14362-1 88.2 0.42 2420 ISO14362-1 88.2 0.42 2421 ISO14362-1 88.2 0.42 2422 ISO14362-1 88.2 0.42 2423 ISO14362-1 88.2 0.42 2424 ISO14362-1 77.96 2436 ISO14362-1 77.96 2437 ISO14862-1 109.89 2438 ISO14362-1 109.89						
2314 EN14362-1						
2320 SO14362-1						
2347 SO14362-1	2320	ISO14362-1				
2350 EN14362-1				C,R(0.05)		First reported 19.4
2352 EN14362-1 87.0 0.33 2357 ISO14362-1 85.5 0.22 2358 ISO14362-1 87.2 0.35 2364 EN14362-1 89.3 0.50 2366 EN14362-1 90 0.55 2367 ISO14362-1 90 0.55 2367 ISO14362-1 91.5 0.67 2370 ISO14362-1 91.5 0.67 2373 ISO14362-1 86.1 0.26 2375 ISO14362-1 81 0.026 2375 ISO14362-1 81 0.026 2378 ISO14362-1 87.5 0.37 2379 ISO14362-1 87.5 0.37 2379 ISO14362-1 87.5 0.37 2379 ISO14362-1 85.0 0.005 2381 ISO14362-1 85.00 0.18 2381 ISO14362-1 85.00 0.18 2382 ISO14362-1 83.2 0.05 2386 EN14362-1 83.2 0.05 2406 ISO14362-1 84.4 0.14 2426 ISO14362-1 84.4 0.14 2426 ISO14362-1 84.4 0.14 2427 ISO14362-1 88.2 0.96 2429 EN14362-1 88.2 0.42 2442 ISO14362-1 88.2 0.42 2442 ISO14362-1 88.2 0.42 2442 ISO14362-1 88.2 0.42 2442 ISO14362-1 82.87 0.02 2449 75.1 0.056 2453 ISO14362-1 77.96 0.035				D(0.05)		
2357 ISO14362-1 85.5 0.22 2358 ISO14362-1 68.8 -1.03 2365 ISO14362-1 87.2 0.35 2365 ISO14362-1 89.3 0.50 2366 EN14362-1 90 0.55 2367 ISO14362-1 85.1 0.19 2370 ISO14362-1 94.76 0.91 2372 ISO14362-1 86.1 0.26 2373 ISO14362-1 86.1 0.26 2375 ISO14362-1 87.5 0.37 2379 ISO14362-1 87.5 0.37 2379 ISO14362-1 45.4126 R(0.05) -2.78 2380 ISO14362-1 85.00 0.18 2382 ISO14362-1 83.2 0.05 2382 ISO14362-1 68.9 -1.03 2380 EN14362-1 76.11 -0.49 2406 ISO14362-1 84.4 0.14 2425 ISO14362-1 88.2 <td< td=""><td></td><td></td><td></td><td>K(0.05)</td><td></td><td></td></td<>				K(0.05)		
2358 ISO14362-1 68.8 -1.03 2364 EN14362-1 87.2 0.35 2365 ISO14362-1 90 0.55 2367 ISO14362-1 91.5 0.19 2370 ISO14362-1 94.76 0.91 2372 ISO14362-1 91.5 0.67 2373 ISO14362-1 86.1 0.26 2375 ISO14362-1 81 -0.12 2378 ISO14362-1 87.5 0.37 2379 ISO14362-1 87.5 0.37 2380 ISO14362-1 80.0 -0.19 2381 ISO14362-1 85.00 0.18 2382 ISO14362-1 85.00 0.18 2382 ISO14362-1 83.2 0.05 2386 EN14362-1 68.9 -1.03 2390 EN14362-1 76.11 -0.49 2406 ISO14362-1 84.4 0.14 2425 ISO14362-1 88.2 0.42 2429 EN14362-1 88.2 0.42 2442 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
2364 EN14362-1 87.2 0.35 2365 ISO14362-1 89.3 0.50 2366 EN14362-1 90 0.55 2367 ISO14362-1 85.1 0.19 2370 ISO14362-1 94.76 0.91 2372 ISO14362-1 81.5 0.67 2373 ISO14362-1 86.1 0.26 2375 ISO14362-1 87.5 0.37 2379 ISO14362-1 87.5 0.37 2379 ISO14362-1 87.5 0.37 2379 ISO14362-1 87.5 0.37 2380 ISO14362-1 85.00 0.18 2381 ISO14362-1 85.00 0.18 2382 ISO14362-1 83.2 0.05 2386 EN14362-1 83.2 0.05 2386 EN14362-1 68.9 -1.03 2390 EN14362-1 76.11 -0.49 2406 ISO14362-1 84.4 0.14 2425 ISO14362-1 88.2 0.96 2429 EN14362-1 88.2 0.96 2429 EN14362-1 88.2 0.96 2429 EN14362-1 88.2 0.96 2429 EN14362-1 82.87 0.02 2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04						
2366 EN14362-1 90 0.55 2367 ISO14362-1 85.1 0.19 2370 ISO14362-1 94.76 0.91 2372 ISO14362-1 91.5 0.67 2373 ISO14362-1 86.1 0.26 2375 ISO14362-1 81 -0.12 2378 ISO14362-1 87.5 0.37 2379 ISO14362-1 45.4126 R(0.05) -2.78 2380 ISO14362-1 80.0 -0.19 2381 ISO14362-1 85.00 0.18 2382 ISO14362-1 83.2 0.05 2386 EN14362-1 68.9 -1.03 2390 EN14362-1 76.11 -0.49 2406 ISO14362-1 37.04 R(0.05) -3.41 2425 ISO14362-1 95.46 0.96 2429 EN14362-1 88.2 0.42 2442 ISO14362-1 88.2 0.42 2442 ISO14362-1 75.1 -0.56 2453 ISO14362-1 77.96 -0.35	2364	EN14362-1	87.2		0.35	
2367 ISO14362-1 85.1 0.19 2370 ISO14362-1 94.76 0.91 2372 ISO14362-1 91.5 0.67 2373 ISO14362-1 86.1 0.26 2375 ISO14362-1 81 -0.12 2378 ISO14362-1 87.5 0.37 2379 ISO14362-1 45.4126 R(0.05) -2.78 2380 ISO14362-1 80.0 -0.19 2381 ISO14362-1 85.00 0.18 2382 ISO14362-1 83.2 0.05 2386 EN14362-1 68.9 -1.03 2390 EN14362-1 76.11 -0.49 2406 ISO14362-1 37.04 R(0.05) -3.41 2425 ISO14362-1 95.46 0.96 2429 EN14362-1 88.2 0.42 2442 ISO14362-1 82.87 0.02 2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
2370 ISO14362-1 94.76 0.91 2372 ISO14362-1 91.5 0.67 2373 ISO14362-1 86.1 0.26 2375 ISO14362-1 81 -0.12 2378 ISO14362-1 87.5 0.37 2379 ISO14362-1 45.4126 R(0.05) -2.78 2380 ISO14362-1 80.0 -0.19 2381 ISO14362-1 85.00 0.18 2382 ISO14362-1 83.2 0.05 2386 EN14362-1 68.9 -1.03 2390 EN14362-1 76.11 -0.49 2406 ISO14362-1 37.04 R(0.05) -3.41 2425 ISO14362-1 84.4 0.14 2426 ISO14362-1 88.2 0.42 2442 ISO14362-1 82.87 0.02 2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04						
2372 ISO14362-1 91.5 0.67 2373 ISO14362-1 86.1 0.26 2375 ISO14362-1 81 -0.12 2378 ISO14362-1 87.5 0.37 2379 ISO14362-1 45.4126 R(0.05) -2.78 2380 ISO14362-1 80.0 -0.19 2381 ISO14362-1 85.00 0.18 2382 ISO14362-1 83.2 0.05 2386 EN14362-1 68.9 -1.03 2390 EN14362-1 76.11 -0.49 2406 ISO14362-1 37.04 R(0.05) -3.41 2425 ISO14362-1 95.46 0.96 2429 EN14362-1 88.2 0.42 2442 ISO14362-1 82.87 0.02 2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04						
2373 ISO14362-1 86.1 0.26 2375 ISO14362-1 81 -0.12 2378 ISO14362-1 87.5 0.37 2379 ISO14362-1 45.4126 R(0.05) -2.78 2380 ISO14362-1 80.0 -0.19 2381 ISO14362-1 85.00 0.18 2382 ISO14362-1 83.2 0.05 2386 EN14362-1 68.9 -1.03 2390 EN14362-1 76.11 -0.49 2406 ISO14362-1 37.04 R(0.05) -3.41 2425 ISO14362-1 84.4 0.14 2426 ISO14362-1 95.46 0.96 2429 EN14362-1 88.2 0.42 2442 ISO14362-1 82.87 0.02 2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04						
2378 ISO14362-1 87.5 0.37 2379 ISO14362-1 45.4126 R(0.05) -2.78 2380 ISO14362-1 80.0 -0.19 2381 ISO14362-1 85.00 0.18 2382 ISO14362-1 83.2 0.05 2386 EN14362-1 68.9 -1.03 2390 EN14362-1 76.11 -0.49 2406 ISO14362-1 37.04 R(0.05) -3.41 2425 ISO14362-1 84.4 0.14 2426 ISO14362-1 95.46 0.96 2429 EN14362-1 88.2 0.42 2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04	2373	ISO14362-1	86.1		0.26	
2379 ISO14362-1						
2380 ISO14362-1 80.0 -0.19 2381 ISO14362-1 85.00 0.18 2382 ISO14362-1 83.2 0.05 2386 EN14362-1 68.9 -1.03 2390 EN14362-1 76.11 -0.49 2406 ISO14362-1 37.04 R(0.05) -3.41 2425 ISO14362-1 84.4 0.14 2426 ISO14362-1 95.46 0.96 2429 EN14362-1 88.2 0.42 2442 ISO14362-1 82.87 0.02 2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04				D(0.05)		
2381 ISO14362-1 85.00 0.18 2382 ISO14362-1 83.2 0.05 2386 EN14362-1 68.9 -1.03 2390 EN14362-1 76.11 -0.49 2406 ISO14362-1 37.04 R(0.05) -3.41 2425 ISO14362-1 84.4 0.14 2426 ISO14362-1 95.46 0.96 2429 EN14362-1 88.2 0.42 2442 ISO14362-1 82.87 0.02 2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04				r(0.05)		
2382 ISO14362-1 83.2 0.05 2386 EN14362-1 68.9 -1.03 2390 EN14362-1 76.11 -0.49 2406 ISO14362-1 37.04 R(0.05) -3.41 2425 ISO14362-1 84.4 0.14 2426 ISO14362-1 95.46 0.96 2429 EN14362-1 88.2 0.42 2442 ISO14362-1 82.87 0.02 2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04						
2386 EN14362-1 68.9 -1.03 2390 EN14362-1 76.11 -0.49 2406 ISO14362-1 37.04 R(0.05) -3.41 2425 ISO14362-1 84.4 0.14 2426 ISO14362-1 95.46 0.96 2429 EN14362-1 88.2 0.42 2442 ISO14362-1 82.87 0.02 2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04	2382	ISO14362-1				
2406 ISO14362-1 37.04 R(0.05) -3.41 2425 ISO14362-1 84.4 0.14 2426 ISO14362-1 95.46 0.96 2429 EN14362-1 88.2 0.42 2442 ISO14362-1 82.87 0.02 2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04	2386	EN14362-1			-1.03	
2425 ISO14362-1 84.4 0.14 2426 ISO14362-1 95.46 0.96 2429 EN14362-1 88.2 0.42 2442 ISO14362-1 82.87 0.02 2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04				D(0.05)		
2426 ISO14362-1 95.46 0.96 2429 EN14362-1 88.2 0.42 2442 ISO14362-1 82.87 0.02 2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04				K(U.U5)		
2429 EN14362-1 88.2 0.42 2442 ISO14362-1 82.87 0.02 2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04						
2442 ISO14362-1 82.87 0.02 2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04						
2449 75.1 -0.56 2453 ISO14362-1 77.96 -0.35 2456 ISO14362-1 109.89 2.04						
2456 ISO14362-1 109.89 2.04					-0.56	
20.10 TOUR 1 12.710 °0.10						
	2700	10017002-1	, <u>,</u> . , , 10		-0.70	

lab	Method	value	mark	z(targ)	remarks
2472	ISO14362-1	81.30		-0.10	
	EN14362-1 ISO14362-1	94.12 87.9		0.86 0.40	
	ISO14362-1	76.17		-0.48	
	ISO14362-1	77.53		-0.38	
2492	In house	69.2		-1.00	
	ISO14362-1	31.07	R(0.05)	-3.86	
	ISO14362-1	102.72	С	1.51	First reported 139.75
	ISO14362-1 EN14362-1	82.323 81.04		-0.02 -0.12	
	ISO14362-1	30.167	R(0.05)	-3.93	
	EN14362-1	69.90	. (0.00)	-0.95	
	ISO14362-1	94.6		0.90	
	EN14362-1	85.7		0.23	
	EN14362-1 ISO14362-1	72.87 89		-0.73 0.48	
	ISO14362-1	38.5	R(0.05)	-3.30	
	ISO14362-1	77.87	11(0.00)	-0.35	
	EN14362-1	90.2		0.57	
	ISO14362-1	76		-0.49	
	EN14362-1	97.1		1.09	
	ISO14362-1 EN14362-1	84.51 10.81	C,R(0.05)	0.14 -5.37	First reported 24.27
	ISO14362-1	12.446	R(0.05)	-5.25	1 list reported 24.21
	ISO14362-1	89.46	. ()	0.51	
	EN14362-1	94.9		0.92	
	EN14362-1	85.00		0.18	
	ISO14362-1	100.02		1.30	
2643 2644	ISO14362-1	90.11		0.56	
2665	EN14362-1	37.24	R(0.05)	-3.40	
	EN14362-1	87.89	()	0.40	
	EN14362-1	79.3		-0.25	
	ISO14362-1	19.05	R(0.05)	-4.76	
2689 2703	EN14362-1	87.6 		0.38	
2719	ISO14362-1	79.2		-0.25	
2734					
2741	EN14362-1	73.919	0.0(0.05)	-0.65	5 1. / 10.00 5 0.0050
	ISO14362-1	5.839735	C,R(0.05)	-5.75	First reported 9.867016056
2773 2789	EN14362-1 ISO14362-1	87.5 10.16	R(0.05)	0.37 -5.42	
	ISO14362-1	90	11(0.00)	0.55	
2823	ISO14362-1	34.598	R(0.05)	-3.59	
	ISO14362-1	78.02		-0.34	
2827	EN14362-1 ISO14362-1	80.84 84.55		-0.13 0.15	
	EN14362-1	25.24	R(0.05)	-4.29	
	EN14362-1	0	R(0.05)	-6.18	
	EN14362-1	82.7		0.01	
	ISO14362-1	55.500		-2.03	
	ISO14362-1 EN14362-1	74.378 13.11	R(0.05)	-0.61 -5.20	
	EN14362-1	85.1	11(0.00)	0.19	
	EN14362-1	88		0.40	
	ISO14362-1	86.4		0.29	
	EN14362-1	82.39		-0.02	
	ISO14362-1 ISO14362-1	63.63 93.93		-1.42 0.85	
	EN14362-1	84.0	С	0.03	First reported 80
	ISO14362-1	38.4	C,R(0.05)	-3.31	First reported 10.5
	ISO14362-1	84.1		0.11	
	EN14362-1	52.67		-2.24	
	ISO14362-1 ISO14362-1	78.137 56.0612		-0.33 -1.99	
	ISO14362-1	87.224		0.35	
	ISO14362-1	82.14		-0.03	
	EN14362-1	89.18		0.49	
	EN14362-1	89.25		0.50	
3192 3200	ISO14362-1	82.0		-0.04	
	ISO14362-1	83.11		0.04	
	In house	63.16		-1.45	
	ISO14362-1	96.69		1.06	
	EN14362-1	89.59 113.33		0.52 2.30	
	ISO14362-1 EN14362-1	76.1		-0.49	
	ISO14362-1	92.2		0.72	

lab	Method	value	mark	z(targ)	remarks
3248	ISO14362-1	86		0.26	
8030	ISO14362-1	50.3525	С	-2.41	First reported 38.4838
	normality n outliers mean (n) st.dev. (n) R(calc.) st.dev.(ISO14362-1:17) R(ISO14362-1:17)	suspect 121 27 82.591 11.3887 31.888 13.3561 37.397	RSD = 14%		





APPENDIX 2 Summary of other reported aromatic amines

Abbreviations of amine names

4AD = 4-Aminodiphenyl (CAS No. 92-67-1)

BD = Benzidine (CAS No. 92-87-5)

4CoT = 4-Chloro-o-toluidine (CAS No. 95-69-2)

2NA = 2-Naphtylamine (CAS No. 91-59-8)

ANT = 2-Amino-4-nitrotoluene (CAS No. 99-55-8)

4CA = 4-Chloraniline (CAS No. 106-47-8)

DAA = 2,4-Diaminoanisol (CAS No. 615-05-4)

DADM = 4,4'-Diaminodiphenyl methane (CAS No. 101-77-9)

DCB = 3,3'-Dichlorobenzidine (CAS No. 91-94-1)

DMoxB = 3,3'-Dimethoxybenzidine (CAS No. 119-90-4)

DMB = 3,3'-Dimethylbenzidine (CAS No. 119-93-7)

DDDM = 3,3'-Dimethyl-4,4'-Diaminodiphenyl methane (CAS No. 838-88-0)

pC = p-Cresidine (CAS No. 120-71-8)

DDM = 4,4'-Diamino-3,3'-dichlorodiphenyl methane (CAS No. 101-14-4)

DDE = 4,4'-Diaminodiphenyl ether (CAS No. 101-80-4)

DDS = 4,4'-Diaminodiphenyl sulfide (CAS No. 139-65-1)

24DAT = 2,4-Diaminotoluene (CAS No. 95-80-7)

TMA = 2,4,5-Trimethylaniline (CAS No. 137-17-7)

oA = o-Anisidine (CAS No. 90-04-0)

24X = 2,4-Xylidine (CAS No. 95-68-1)

25X = 2,5Xylidine (CAS No. 95-78-3)

26X = 2,6-Xylidine (CAS No. 87-62-7)

TX = Total of Xylidine

oAAT = o-Aminoazotoluene (CAS No. 97-56-3)

oTol = o-Toluidine (CAS No. 95-53-4)

oAAT&oTol = Sum of o-Aminoazotoluene and o-Toluidine

Summary of other reported aromatic amines in sample #21550, see abbreviations above

lab	4AD	BD	4CoT	2NA	ANT	4CA	DAA	DADM	DCB	DMoxB	DMB	DDDM
210												
230	ND	ND	ND									
339	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
348	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
362												
551												
622	0.06	0.00	0.90	0.01	0.40	0.01	0.05	0.00	0.58	2.16	0.00	0.00
623	ND	ND	ND									
840	ND	ND	ND									
841	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2102	ND	ND	8.36	ND	ND	ND						
2115												
2129												
2132	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2138	ND	ND	ND									
2139												
2165	ND	ND	ND									
2170												
2184	ND	ND	ND									
2201	ND	ND	ND									
2213	<5	<5	5.12	<5	<5	<5	<5	<5	<5	<5	<5	<5
2218												
2232												
2236												
2238	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

lab	4AD	BD	4CoT	2NA	ANT	4CA	DAA	DADM	DCB	DMoxB	DMB	DDDM
2247	ND											
2250 2255 2256	ND 	ND 	ND 	ND 	ND	ND	ND 	ND 	ND 	ND 	ND 	ND
2258	ND											
2265	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
2271	ND											
2286 2289	<5 <5											
2290	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2291	ND											
2293												
2295 2297	 <5	<5	<5	 <5	 <5	 <5	58.3	 <5	 <5	 <5	<5	 <5
2301	nd											
2310	ND											
2311 2313	ND ND											
2314												
2320	ND											
2330 2347	ND <5											
2350												
2352												
2357												
2358 2364	n.d. 											
2365	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2366	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2367 2370	ND <5											
2370	ND											
2373												
2375												
2378 2379	ND											
2380	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2381												
2382 2386	<5.0 <5											
2390												
2406	AUD.	ND.		AUD.		AID.	AUD.	AUD.	AUD.			
2425 2426	ND ND											
2429	ND											
2442	ND											
2449 2453												
2456			Traces									
2459	ND											
2472 2475	<5 ND											
2476												
2486	ND											
2489 2492	ND ND											
2495	<5	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5
2501												
2511 2514												
2523	0	0	0	0	0	0	0	0	0	0	0	0
2528												
2534	ND											
2549 2553	ND ND											
2560	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2561												
2565 2567	<5 <5											
2569	ND											
2572	<5 ND	<5 ND	<5 ND	<5	<5 ND							
2582 2590	ND 											
2591	ND											
2605	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
2609 2618												
2010												

lab	4AD	BD	4CoT	2NA	ANT	4CA	DAA	DADM	DCB	DMoxB	DMB	DDDM
2638	ND	ND	ND	ND ND	ND ND	ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND
2643												
2644												
2665	<5	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5
2668	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2674	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2678	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2689	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2703												
2719												
2734												
2741	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
			5.9172									
2743			8706									
2773	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2789												
2798												
2823												
2826	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2827	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2829	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2864	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2866	0	0	0	0	0	0	0	0	0	0	0	0
2867	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2892												
2948	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2953												
2955	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2959												
2960												
3110 3116												
3118	<5	<5	 <5	 <5	 <5	 <5	 <5	 <5	< 5	 <5	<5	 <5
3134												
3149												
3153	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3154												
3160	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3172	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
3176												
3182	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3185	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
3190	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3192												
3200	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3209												
3210												
3214	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3218	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3222	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3228	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3237												
3248												
8030	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Summary of aromatic amines in sample #21550 continued

lab	рС	DDM	DDE	DDS	TMA	οA	24X	25X	26X	TX	oAAT	oTol	oAAT+ oTol
210													
230	ND		ND	ND	ND	ND	ND						
339	<5	<5	<5	<5	<5	<5					<5	<5	<5
348	<5	<5	<5	<5	<5	<5	<5		<5		<5	<5	<5
362													
551													
622	0.00	0.00	0.77	0.00	0.00	0.00	0.00		0.00		0.00	0.47	0.47
623	ND	ND	ND	ND	ND	ND							
840	ND	ND	ND	ND	ND	ND							
841	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5	<5	
2102	ND	ND	ND	ND	2.95	2.95							
2115													
2129													
2132	<5	<5	<5	<5	<5	<5	<5	Not Apl	<5	Not Apl	<5	<5	Not Apl
2138	ND	ND .	ND	ND .	ND	ND	ND .						
2139													

	•	-	•	-		-	•	•	9		-	-	oAAT+
lab	рС	DDM	DDE	DDS	TMA	οA	24X	25X	26X	TX	oAAT	oTol	oTol
2165	ND		ND		ND	ND							
2170 2184	ND		ND		ND	ND							
2201	ND	ND	ND	ND	ND	ND	ND						
2213	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2218													
2232 2236													
2238	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2247	ND	ND	ND	ND	ND	ND	ND						
2250							AUD.						AID.
2255 2256	ND 	ND 	ND 	ND 	ND 	ND 	ND 						
2258	ND	ND	ND	ND	ND	ND	ND						
2265	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5
2271	ND	ND	ND	ND <5	ND	ND	ND						
2286 2289	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5						
2290	<5	<5	<5	<5	<5	<5	< 5	<5	<5	<5	<5	<5	<5
2291	ND	ND	ND	ND	ND	ND	38						
2293 2295													
2295 2297	 <5	 <5	<5	 <5	<5		<5	 <5		 <5	 <5	<5	<5
2301	nd	Nd	nd	nd	nd	nd	nd						
2310	ND	ND	ND	ND	ND	ND	ND						
2311	ND	ND	ND	ND	ND	ND	ND						
2313 2314	ND 	ND 	ND 	ND 	ND 	ND 	ND 						
2320	ND		ND		ND	6.756	6.756						
2330	ND	Not Apl	ND	ND	ND	ND	ND						
2347	<5	<5	<5	<5	<5	<5	<5		<5		<5	<5	<5
2350 2352													
2357													
2358	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.						
2364													 /F
2365 2366	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5						
2367	ND		ND		ND	ND							
2370	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2372	ND	ND	ND	ND	ND	ND	ND						
2373 2375													
2378													
2379	ND	N tested	ND	N tested	ND	4.3595	N tested						
2380	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	< 5
2381 2382	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2386	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2390													
2406 2425	ND	ND.	ND	ND.	ND.	NID.	NID.	ND	ND	ND.	ND.	ND.	ND
2425	ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND	ND	ND ND	ND ND	ND ND	ND
2429	ND	ND	ND	ND	ND	ND	ND						
2442	ND				ND	ND							
2449 2453													
2456													
2459	ND	ND	ND	ND	ND	ND	ND						
2472	<5 ND		<5 ND		<5	<5							
2475 2476	ND 	ND 	ND 										
2486	ND	ND	ND	ND	ND	ND	ND						
2489	ND	ND	ND	ND	ND	ND	ND						
2492	ND		ND		ND	ND	ND						
2495 2501	<5 		<5 			<5 							
2511													
2514													
2523	0	0	0	0	0	0	0	0	0	0	0	0	0
2528 2534	ND	ND	ND	ND	ND	ND	ND						
2549	ND	ND	ND	ND	ND	ND	ND ND						
2553	ND	ND	ND	ND	ND	ND	ND						
2560	<5	<5	<5	<5	<5	<5	<5		<5		<5	<5	<5
2561													

	_	_		•									oAAT+
lab	pC	DDM	DDE	DDS	TMA	οA	24X	25X	26X	TX	oAAT	oTol	oTol
2565	<5	<5	<5	<5	<5	<5	<5		<5	<5	<5	<5	<5
2567	<5	<5	<5	<5	<5	<5	<5		<5	<5		<5	<5
2569	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	
2572	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2582	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2590													
2590	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND
2605	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00					<5.00	<5.00	<5.00
2609													
2618													
2638	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.02
2643													
2644													
2665	<5	<5	<5	<5		<5	<5		<5			7.56	
2668	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2674	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND
2678	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.30	8.30
2689	ND	ND	ND	ND	ND	ND	ND	N tested	ND	N tested	ND	ND	ND
2703													
2719													
2734													
2741	<5	<5	<5	<5	<5	<5	<5		<5		<5	<5	
2743												3.0082	
2773	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2789													
2798													
2823													
2826	<10	<10	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10
2827	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2829	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2864	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND
2866	0	0	0	0	0	0					0	0	0
2867	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	
2892													
2948	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2953												2.01	
2955	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2959													
2960													
3110													
3116													
3118	<5	<5	<5	<5	<5	<5	<5		<5	<5	<5	<5	<5
3134												3.0*	
3149													
3153	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3154													
3160	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3172	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	
3176													
3182	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3185	<5	<5	<5	<5	<5	<5	<5	\	<5	\	<5	<5	<5
3190	<5	<5	<5	<5	<5	<5	<5		<5		<5	<5	<5
3192													
3200	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3209													
3210													
3214	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3218	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3222	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3228	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	
3237													
3248													
8030	ND	ND	ND	ND	ND	ND	ND	N tested	ND	N tested	ND	3.9215	N tested

^{*)} Lab 3134 first reported for oTol 40

Summary of other reported aromatic amines in sample #21551, see abbreviations above

lab	4AD	BD	4CoT	2NA	ANT	4CA	DAA	DADM	DCB	DMoxB	DMB	DDDM
210												
230	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
339	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
348	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
362												
551												
622	0.03	0.00	0.00	0.01	0.75	0.01	0.08	0.00	0.18	0.81	0.00	0.00
623	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
840 841	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5
2102	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2115												
2129												
2132	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2138	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2139												
2165	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2170 2184	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2201	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2213	<5	<5	<5	<5	< 5	<5	<5	<5	<5	< 5	<5	<5
2218												
2232												
2236												
2238	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND
2247	ND 	ND	ND	ND	ND	ND 	ND 	ND 	ND 	ND	ND	ND
2250 2255	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2256												
2258	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2265	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
2271	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND -	ND	ND
2286	<5	<5	<5	<5 -5	<5 45	<5	<5 -5	<5 -7	<5	<5 -5	<5	<5
2289 2290	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5
2291	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2293												
2295												
2297	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2301	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2310	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2311 2313	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
2314												
2320	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2330	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2347	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2350												
2352												
2357 2358	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	 n.d.	n.d.
2364	11.u.	11.u.	11.u.	11.u. 	11.u. 	11.u.	11.u.	11.u.	11.U. 	11.u.	11.u.	11.u.
2365	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2366	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2367	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2370	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2372	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2373												
2375 2378												
2378	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2380	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2381												
2382	< 5.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2386	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2390												
2406 2425	ND.	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2425 2426	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
2420	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2442	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2449												
2453												
2456		AUD.				AUD.					AUD.	
2459	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

lab	4AD	BD	4CoT	2NA	ANT	4CA	DAA	DADM	DCB	DMoxB	DMB	DDDM
2472	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2475	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2476		AUD.		AUD.		AUD.	AUD.			AUD.	NID.	
2486	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2489 2492	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
2495	<5	<5	<5	<5		<5	<5	<5	<5	<5	<5	<5
2501												
2511												
2514												
2523	0	0	0	0	0	0	0	0	0	0	0	0
2528												
2534 2549	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
2553	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2560	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2561												
2565	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2567	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2569	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2572	<5	<5	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND
2582 2590	ND 	ND 	ND 	ND 	ND 	ND 	ND 	ND 	ND 	ND 	ND 	ND
2591	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2605	<5.00	<5.00	< 5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
2609												
2618												
2638	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2643												
2644	 <5	 <5	<5	 -5		 <5	 <5	 <5	 <5	 <5	 <5	 <5
2665 2668	ND	ND	ND	<5 ND	ND	ND	ND	ND	ND	ND	ND	ND
2674	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2678	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2689	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2703												
2719												
2734	 <5	 <5	<5	 <5	<5	<5	 <5	 <5	 <5	 <5	<5	 <5
2741 2743				~ 5	<u></u>				<u></u>			~ 5
2773	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2789												
2798												
2823								60.327				
2826	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2827 2829	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
2864	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2866	0	0	0	0	0	0	0	0	0	0	0	0
2867	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2892												
2948	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2953 2955	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2959												
2960												
3110												
3116												
3118	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3134 3149												
3153	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3154												
3160	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3172	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
3176	AUD.	AUD.		AUD.		AUD.	AUD.		AID.	AUD.	AUD.	
3182	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3185 3190	< 5 <5	< 5 <5	< 5 <5	< 5 <5	< 5 <5	< 5 <5	< 5 <5	< 5 <5	< 5 <5	< 5 <5	< 5 <5	< 5 <5
3190			<u></u>							<u></u>		
3200	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3209												
3210												
3214	< 5	< <u>5</u>	<5	<5	< 5	< <u>5</u>	<5	<5	<5	<5	< 5	<5
3218	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3222 3228	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
J220	מאו	מאו	שויו	ND	ND	ואט	ואט	ND	ואט	טוו	שוו	ND

lab	4AD	BD	4CoT	2NA	ANT	4CA	DAA	DADM	DCB	DMoxB	DMB	DDDM
3237												
3248												
8030	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Summary of aromatic amines in sample #21551 continued

					-								oAAT+
210	pC 	DDM	DDE	DDS	24DAT	TMA	24X	25X	26X	TX 	oAAT	oTol	oTol
230	ND		ND	ND	ND	ND	ND						
339 348	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	 <5		 <5		<5 <5	<5 <5	<5 <5
362													
551													
622 623	0.00 ND	0.00 ND	0.34 ND	0.00 ND	0.00 ND	0.00 ND	0.00 ND	ND	0.00 ND	ND	0.00 ND	0.00 ND	0.00 ND
840	ND	ND	ND	ND	ND	ND							
841	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 0.05	<5 ND	<5 0.05	4.00	<5 ND	<5 ND	
2102 2115	ND 	ND 	ND 	ND 	ND 	ND 	0.85	ND 	0.95	1.80	ND 	ND 	ND
2129													
2132 2138	<5 ND	<5 ND	Not Apl ND	<5 ND	<5 ND	Not Apl ND							
2139													
2165	ND		ND		ND	ND							
2170 2184	ND		ND		ND	ND							
2201	ND	ND	ND	ND	ND	ND							
2213 2218	<5 	<5 	<5 	<5 	<5 	<5 							
2232													
2236													
2238 2247	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND							
2250													
2255	ND	ND	ND	ND 	ND	ND	ND	ND	ND	ND	ND	ND 	ND
2256 2258	ND	ND	ND	ND	ND	ND							
2265	< 5	< 5	< 5	< 5	< 5	< 5	< 5		< 5	< 5	< 5	< 5	< 5
2271 2286	ND <5	ND <5	ND <5	ND <5	ND <5	ND <5							
2289	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2290	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND	<5							
2291 2293	ND 	ND 	ND 	ND 	ND 	88 							
2295													
2297 2301	<5 ND	ND	<5 ND	<5 ND	<5 ND	<5 ND	<5 ND						
2310	ND	ND	ND	ND	ND	ND							
2311	ND	ND	ND	ND	ND	ND							
2313 2314	ND 	ND 	ND 	ND 	ND 	ND 							
2320	ND	ND	ND	ND	ND	ND							
2330 2347	ND <5	ND	ND <5	ND	ND <5	ND <5	ND <5						
2350													
2352													
2357 2358	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.							
2364													
2365	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2366 2367	<5 ND	<5 ND	<5 	<5 ND	<5 ND	<5 							
2370	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2372 2373	ND 	ND 	ND 	ND 	ND 	ND 							
2375													
2378							AUD.						
2379 2380	ND <5	N tested <5	ND <5	<5	ND <5	ND <5	N tested <5						
2381													
2382 2386	<5	<5	<5	<5	<5	<5 <5	<5 <5	<5 <5	<5	<5 <5	<5	<5	<5
2386	<5 	<5 	<5 	<5 	<5 	<5 							
2406													

	•	-	-	•		-	_	•	•	-		-	oAAT+
lab	рС	DDM	DDE	DDS	24DAT	TMA	24X	25X	26X	TX	oAAT	oTol	oTol
2425	ND												
2426	ND												
2429 2442	ND ND	ND 	ND 	ND 	ND 	ND ND	ND 						
2449													
2453													
2456													
2459	ND												
2472	<5 ND	<5	<5 ND	<5 ND	<5	<5 ND	<5 ND	ND.	<5		<5	<5 ND	
2475 2476	ND	ND 	ND	ND	ND 	ND		ND 			ND 	ND	
2486	ND												
2489	ND												
2492	ND		ND		ND	ND	ND						
2495	<5	<5	<5	<5	<5	<5	<5		<5			<5	
2501 2511													
2514													
2523	0	0	0	0	0	0	0	0	0	0	0	0	0
2528													
2534	ND												
2549 2553	ND ND												
2560	ND <5	<5	ND <5	<5	<5	<5	<5		<5		ND <5	<5	ND <5
2561													
2565	<5	<5	<5	<5	<5	<5	<5		<5	<5	<5	<5	<5
2567	<5	<5	<5	<5	<5	<5	<5		<5	<5		<5	<5
2569 2572	ND <5	 <5	ND <5	 <5	ND <5	ND <5	 <5						
2572 2582	ND												
2590													
2591	ND		ND		ND	ND	ND						
2605	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00					<5.00	<5.00	<5.00
2609													
2618 2638	ND												
2643													
2644													
2665	<5	<5	<5	<5	<5	<5	<5		<5			<5	
2668	ND												
2674 2678	ND ND	ND	ND ND	ND	ND ND	ND ND	ND ND						
2689	ND	N tested	ND	N tested	ND	ND	ND						
2703													
2719													
2734													
2741 2743	<5 		<5 		<5 	<5 							
2773	ND												
2789													
2798													
2823													
2826 2827	<10 ND	ND	<10 ND	<10 ND	<10 ND	<10 ND	<10 ND						
2829	ND												
2864	ND		ND		ND	ND	ND						
2866	0	0	0	0	0	0					0	0	
2867	ND		ND	ND									
2892 2948	ND												
2953													
2955	ND												
2959													
2960													
3110 3116													
3118	 <5	 <5	 <5	<5	<5	 <5	<5		<5	 <5	<5	<5	 <5
3134													
3149													
3153	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3154 3160	ND.	ND	ND.										
3160 3172	ND < 5	ND 	ND < 5	ND < 5	ND 								
3172													
3182	ND												
3185	< 5	< 5	< 5	< 5	< 5	< 5	< 5	\	< 5	\	< 5	< 5	< 5

lab	рС	DDM	DDE	DDS	24DAT	TMA	24X	25X	26X	TX	oAAT	oTol	oAAT+ oTol
3190	<5	<5	<5	<5	<5	<5	<5		<5		<5	<5	<5
3192													
3200	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3209													
3210													
3214	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3218	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3222	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3228	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	
3237													
3248													
8030	ND	ND	ND	ND	ND	ND	ND	N tested	ND	N tested	ND	ND	N tested

APPENDIX 3 Analytical details

		Comple weed		
lab	Laboratory accredited	Sample used as received or further grinded or cut	Sample intake in grams	Technique used to release/extract the analyte(s)
210	Yes		g	
230	Yes	Further cut	0.5g	Mechanical Shaking
339	No	Used as received	1.0	Soxhlet PE-S-930-LABE-006: chlorobenzene reflux
348	Yes	Further cut	1	PE-S-930-LABE-000: Chloroberizerie reilux PE-S-930-LABE-005: citrate buffer solution at 70±2°C
362	Yes	Used as received		Soxhlet
551	Yes	Further cut	1.0 g	Soxhlet
			1g	
622 623	Yes	Used as received	1 gram 1	Liebig Condensor
	Yes	Further cut		Soxhlet
840	Yes	Further cut	0.5	Soxhlet Water bath
841	Yes	Used as received	1 gram	
2102	No	Used as received	1 gram	Soxhlet
2115	Yes Yes	Used as received	1g	tort Dutul mothyd othor
2129	Yes	Used as received	0,5 g	tert-Butyl-methyl-ether
2132		Further cut	0.5g	Ultrasonic
2138	Yes	Further cut	0.5 ~ 1 g	Soxhlet
2139	Yes	Used as received	0.503 g	Soxhlet
2165	Yes	Used as received	2g	Define Condenses
2170	Yes	Used as received	0.9g	Reflux Condenser
2184	Yes	Used as received	2g	Soxhlet
2201 2213	Yes 	Used as received	0.5g	
2218	No	Further cut		Mechanical Shaking
2232	Yes	Further cut	1g	Wednamour chaking
2236			.9	
2238	Yes	Used as received	1g	ASE
2247	Yes	Further cut	1 to 2 gram	Soxhlet
2250	Yes	Used as received	0,5	according to 14362-1
2255	Yes	Used as received	0.6	abbording to 14002 1
2256	Yes	Further cut	1.0	ASE
2200	100	r drifter out	21550 - 0.5038	NOL
2258	Yes	Used as received	21551 - 0.5016	Ultrasonic
2265	Yes	Used as received	0,5g	Ultrasonic
2271	Yes	Further cut	0.5g	extraction apparatus
2286	No	Further cut	0.5g	Soxhlet
2289	Yes	Further cut	1.0g	
2290	Yes		9	
2291	Yes	Used as received	0.500g	
2293				
2295	Yes	Further cut	1 gram	Ultrasonic
2297	Yes	Used as received	1g	Soxhlet
2301	Yes	Further cut	1 gram	Soxhlet
2310	Yes	Used as received	1	ASE
2311	Yes	Further cut	0.5	Reduction by Sodium Dithionite
2313	Yes	Further cut	1.0g	,
2314	Yes	Further cut	O.5 GM	Mechanical Shaking
2320	Yes	Further cut	0.5g	Mechanical Shaking
2330	Yes	Used as received	0.50 g	Soxhlet
2347	Yes	Further cut	1.0g	
2350	Yes	Used as received	0.5086 g	Soxhlet
2352	Yes	Further cut	0.5g	
2357			-	
2358	Yes	Further cut	1 g	Ultrasonic
		#21550 further	#21550: 0.5065g #21551:	
2364	Yes	cutting	0.5004g	Soxhlet
2365	Yes	Used as received	0.5g	Mechanical Shaking
2366	Yes	Further cut	1	
2367	Yes	Used as received	0.5	
2370	Yes	Further cut	0.5 g	Mechanical Shaking
2372	No	Further cut	1g ¯	Ultrasonic
2373	Yes	Further cut	0.5	Soxhlet
2375	Yes	Further cut	1 g	
2378	Yes	Used as received	0.5g	
2379	Yes	Further cut	1 g	
2380	Yes	Used as received	0.5 g	
2381	Yes	Further cut	0.5gm	Mechanical Shaking
2382	Yes	Used as received	0.5g	Mechanical Shaking
2386	Yes	Used as received	0,5 g	Extraction according to EN 14326-1
2390	Yes	Further cut	#21550: 0.5g #21551 1g	Mechanical Shaking
2406	Yes	Used as received	1 gram	Soxhlet
2425	Yes	Further cut	0.5 g	Mechanical Shaking
2426	Yes	Further cut	Approx 0.5 gram	Mechanical Shaking
2429	Yes	Used as received	0.6	Soxhlet

Laboration Lab			O1		
Lab Accredited grinded or cut In grisms Technique used to release/extract the analyte(s) #21550 - 1.0042g # 21551 Sowhiet Sowhiet		Laboratory	Sample used as received or further	Sample intake	
## 21550 - 1.0942g # 21551 2442 Yes Further cut -1.0954 Mechanical Shaking 2459 Yes Further cut -1.0954 Mechanical Shaking 2459 Yes Used as received 1.0g Soxhiet 2477 Yes Used as received 0.5g Soxhiet 2478 Yes Used as received 0.5g Soxhiet 2479 Yes Used as received 0.5g Soxhiet 2489 Yes Used as received 0.570g sample for 21550 2489 Yes Further cut 0.5000 Waterbath 2489 Yes Further cut 0.5000 Waterbath 2489 Yes Used as received 0.2g Waterbath 2492 Yes Used as received 0.2g Waterbath 2492 Yes Used as received 0.2g Waterbath 2492 Yes Used as received 21550-0.2590 & 1251 2511	lab	_		and the second s	Technique used to release/extract the analyte(s)
2445 Yes	- 14.2	400.04.04	ga.a. o. oa.		· · · · · · · · · · · · · · · · · · ·
2453 Yes				- 1.0054g	
2459 Ves					
2472 Yes					
2475 Yes Used as received 2g					
2476 Ves				•	
2486 Ves					7.62
2489 Yes					
21550 - 0.5098; 21551 - 0.5099					
2489 Yes	2486	Yes	Used as received		Mechanical Shaking
2495 Yes Surder out 0.2 - 0.5 g Thermal Desorption	0.400	V	Frontle con cont	The state of the s	W-t-d-d-
2511					•
2514 Yes				. •	•
2524 Yes	2511			S .	· ·
The extraction apparatus is using the method/apparatus is using the method/apparatus islated in ISO14362-1 8.1 Figure 1. Soxiblet				21550=0.2560 &	
2528 Yes	2514	Yes	Used as received	21551=0.3270	
2528 Yes	0500	V	Frontle con cont	4.0	
2544 Yes					
2549 Yes				O .	
2555 Yes Further cut 1g Mechanical Shaking 2561 Yes Further cut 0.5 gm Soxhlet 2561 Yes Further cut 0.5 gm Soxhlet 2567 Yes Further cut 0.5 gm Soxhlet 2572 Yes Used as received 1 gm Soxhlet 2572 Yes Used as received 1 G Soxhlet 2580 Yes Used as received 1.0 gms Thermal Desorption 2591 Yes Used as received 1.0 gm Mechanical Shaking 2609 Yes Used as received 1.0 gm Mechanical Shaking 2618 Yes Used as received 1.0 gm Mechanical Shaking 2618 Yes Used as received 0.5 g Soxhlet 2618 Yes Used as received 0.5 g Soxhlet 2643 No Used as received 2 Ultrasonic Soxhlet 2644 Yes Used as received 2 Ultrasonic S				, , ,	
2560 Yes				•	
2561 Yes					
2567 Yes Used as received 1 gm			Used as received	1	
2569					
2582 Yes				•	
2582 Yes				ı gm	
2591 Yes				0.60 a	
2591 Yes					· · · · · · · · · · · · · · · · · · ·
2609 Yes				1.0 grams	Thermal Desorption
2618 Yes	2605	Yes	Used as received	1.000	
ISO 14362-1 Procedure:10.2(#21550)					
2638 No Used as received 1 gm ISO 14362-1 Procedure:10.1 (#21551) 2643 No Used as received 2 Soxhlet 2665 — Used as received 2 Ultrasonic 2667 — Used as received 2.5 gm Soxhlet 2678 No Further cut 0.5 gm Soxhlet 2689 Yes Further cut 0.5 gm Soxhlet 2703 — — — 2719 Yes Further cut 0.5 gm Soxhlet 2734 — — — 2741 Yes Further cut 0.5 — 2743 Yes Used as received 0.7 g Soxhlet 2773 Yes Further cut 1.005g Soxhlet 2773 Yes Used as received 0.5 Mechanical Shaking 2798 Yes Used as received 0.5 Mechanical Shaking 2798 Yes Used as received 1 g	2618	Yes	Used as received	1.0 gm	
2643 No Used as received 2 Ultrasonic 2645 Yes Used as received 2 Ultrasonic 2665 — Used as received 0.5 gms Soxhlet 2674 Yes Used as received 2.0g Mechanical Shaking 2678 No Further cut 0.5g Thermal Desorption 2689 Yes Further cut 0.5g Soxhlet 27703 — — — 2719 Yes Further cut 0.5g Soxhlet 2734 — — — 2741 Yes Further cut 0.5 — 2773 Yes Further cut 1.0005g Soxhlet 2773 Yes Further cut 1.0005g Soxhlet 2773 Yes Used as received 1 thermal bath 2782 Yes Used as received 1 Ultrasonic 2823 Yes Used as received 1 Soxhlet	2620	No	Llood on received	1 am	, ,
2844 Yes Used as received 2 Ultrasonic 2665					
2665 Used as received 0.5 gms Soxhlet 2674 Yes Used as received 2.0g Mechanical Shaking 2678 No Further cut 0.5g Thermal Desorption 2689 Yes Further cut 0.5g Soxhlet 2703 2719 Yes Further cut 0.5g Soxhlet 2734 2741 Yes Further cut 0.5 2773 Yes Further cut 1.0005g Soxhlet 2773 Yes Used as received 1 thermal bath 2789 Yes Used as received 1 thermal bath 2798 Yes Used as received 1 Mechanical Shaking 2823 Yes Used as received 1 Ultrasonic 2826 Yes Used as received 1 Ultrasonic 2827 Yes Further cut 1.0 g So					
2674 Yes Used as received 2.0g Mechanical Shaking 2678 No Further cut 0.5g Thermal Desorption 2689 Yes Further cut 0.5g Soxhlet 2703 2719 Yes Further cut 0.5g Soxhlet 2734 2741 Yes Further cut 0.5 2773 Yes Further cut 0.50 2773 Yes Further cut 1.0005g Soxhlet 2773 Yes Further cut 1.0005g Soxhlet 2789 Yes Used as received 1 thermal bath 2798 Yes Used as received 1 Ultrasonic 2823 Yes Used as received 1 Ultrasonic 2826 Yes Used as received 1.0 g Soxhlet 2829 Yes Used as received 1 <td></td> <td></td> <td></td> <td></td> <td></td>					
2678 No Further cut 0.5g Thermal Desorption 2689 Yes Further cut 0.5g Soxhlet 2703	2668	Yes	Used as received	0.5 gms	Soxhlet
2889 Yes Further cut 0.5g Soxhlet 2703 2719 Yes Further cut 0.5g Soxhlet 2734 2741 Yes Further cut 0.7 g Soxhlet 2773 Yes Used as received 0.7 g Soxhlet 2773 Yes Further cut 1.0005g Soxhlet 2789 Yes Used as received 1 thermal bath 2798 Yes Used as received 0.5 Mechanical Shaking 2823 Yes Used as received 1 g Ultrasonic 2827 Yes Used as received 1 g Soxhlet 2829 No Further cut 1.0 g Soxhlet 2864 Yes Used as received 1 g Heating block 2892 Yes Used as received 1 g Water bath - 70°C 2953 No Further cut 1 g Mechan					S .
2703				0.5g	
2719 Yes				0.59	
2734				0.5a	
2743 Yes Used as received 0,7 g Soxhlet 2773 Yes Further cut 1.0005g Soxhlet 2789 Yes Used as received 1 thermal bath 2798 Yes Used as received Soxhlet 2823 Yes Used as received Soxhlet 2826 Yes Used as received 1 g 2827 Yes Further cut 0.5 g Soxhlet 2829 No Further cut 1.0 g Soxhlet 2864 Yes Used as received 1 soxhlet 2867 Yes Used as received 1 soxhlet 2867 Yes Used as received 1 soxhlet 2982 Yes Used as received 1 soxhlet 2953 No Further cut 1 g Water bath - 70°C 2955 Yes Used as received 1 g Mechanical Shaking 2950 Yes Used as received 2.5g<				9	
2773 Yes Further cut 1.0005g Soxhlet 2789 Yes Used as received 1 thermal bath 2798 Yes Used as received 0.5 Mechanical Shaking 2823 Yes Used as received 1 g Ultrasonic 2827 Yes Further cut 0.5 g Soxhlet 2829 No Further cut 1.0 g 2864 Yes Used as received 0.5 g Soxhlet 2866 Yes Used as received 1 2867 Yes Used as received 1g Heating block 2892 Yes Used as received 1g Water bath - 70°C 2953 No Further cut 1g Water bath - 70°C 2955 Yes Used as received 1g Mechanical Shaking 2959 Yes Used as received 2.5g Soxhlet 3110 #21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction usin	2741	Yes	Further cut	0.5	
2789 Yes Used as received 0.5 Mechanical Shaking 2823 Yes Used as received Soxhlet 2826 Yes Used as received 1 g 2827 Yes Further cut 0.5g Soxhlet 2829 No Further cut 1.0 g 2864 Yes Used as received 0.5 g Soxhlet 2866 Yes Used as received 1 2867 Yes Used as received 1g Heating block 2892 Yes Used as received 1g 2948 1 2953 No Further cut 1g Water bath - 70°C 2955 Yes Used as received 1g Mechanical Shaking 2959 Yes Used as received 2.5g Soxhlet 3110 # 21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene reflux before the buffer extracti					
2798YesUsed as received Used as received0.5Mechanical Shaking Soxhlet2823YesUsed as received1 gUltrasonic2827YesFurther cut0.5gSoxhlet2829NoFurther cut1.0 g2864YesUsed as received0.5 gSoxhlet2866YesUsed as received12867YesUsed as received1gHeating block2892YesUsed as received1gWater bath - 70°C294812953NoFurther cut1gWater bath - 70°C2955YesUsed as received0.62959YesUsed as received1gMechanical Shaking2960YesUsed as received2.5gSoxhlet3110#21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene reflux before the buffer extraction.3116YesUsed as received5oxhlet3118YesFurther cut0.5Reflux3134NoUsed as receivedSoxhlet				3	
2823 Yes Used as received 1 g Ultrasonic 2827 Yes Further cut 0.5g Soxhlet 2829 No Further cut 1.0 g 2864 Yes Used as received 0.5 g Soxhlet 2866 Yes Used as received 1 2867 Yes Used as received 1g Heating block 2892 Yes Used as received 1g Water bath - 70°C 2948 1 2955 Yes Used as received 0.6 Water bath - 70°C 2955 Yes Used as received 1g Mechanical Shaking 2960 Yes Used as received 2.5g Soxhlet 3110 #21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3149 Yes Further					
2826 Yes Used as received 1 g Ultrasonic 2827 Yes Further cut 0.5 g Soxhlet 2829 No Further cut 1.0 g 2864 Yes Used as received 0.5 g Soxhlet 2866 Yes Used as received 1 2867 Yes Used as received 1g Heating block 2892 Yes Used as received 1g 2948 1 2955 Yes Used as received 0.6 Water bath - 70°C 2955 Yes Used as received 1g Mechanical Shaking 2960 Yes Used as received 2.5g Soxhlet 3110 #21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3134 No Used as received				U.J	•
2827 Yes Further cut 0.5g Soxhlet 2829 No Further cut 1.0 g 2864 Yes Used as received 0.5 g Soxhlet 2866 Yes Used as received 1 2867 Yes Used as received 1g Heating block 2892 Yes Used as received 1g 2948 1 2953 No Further cut 1g Water bath - 70°C 2955 Yes Used as received 0.6 2959 Yes Used as received 1g Mechanical Shaking 2960 Yes Used as received 2.5g Soxhlet 3110 # 21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene 3116 Yes Used as received 1 grams reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3134 No Used as received Soxhlet 3149 Yes Further cut 1 g Soxhlet				1 g	
2829 No Further cut 1.0 g 2864 Yes Used as received 0.5 g Soxhlet 2866 Yes Used as received 1 2867 Yes Used as received 1g Heating block 2892 Yes Used as received 1g 2948 2953 No Further cut 1g Water bath - 70 °C 2955 Yes Used as received 1g Mechanical Shaking 2959 Yes Used as received 1g Soxhlet 2960 Yes Used as received 2.5g Soxhlet 3110 # 21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene 3116 Yes Used as received 1 grams reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3134 No Used as received Soxhlet 3149 Yes Further cut 1 g Soxhlet					
2866 Yes Used as received 1g Heating block 2892 Yes Used as received 1g 2948 1 2953 No Further cut 1g Water bath - 70°C 2955 Yes Used as received 0.6 2959 Yes Used as received 1g Mechanical Shaking 2960 Yes Used as received 2.5g Soxhlet 3110 # 21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene 3116 Yes Used as received 1 grams reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3134 No Used as received Soxhlet 3149 Yes Further cut 1 g Soxhlet				1.0 g	
2867 Yes Used as received 1g 2892 Yes Used as received 1g 2948 1 2953 No Further cut 1g Water bath - 70°C 2955 Yes Used as received 0.6 2959 Yes Used as received 1g Mechanical Shaking 2960 Yes Used as received 2.5g Soxhlet 3110 # 21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3134 No Used as received Soxhlet 3149 Yes Further cut 1 g Soxhlet				. •	
2892 Yes Used as received 1g 2948 1 2953 No Further cut 1g Water bath - 70°C 2955 Yes Used as received 0.6 2959 Yes Used as received 1g Mechanical Shaking 2960 Yes Used as received 2.5g Soxhlet 3110 # 21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene 3116 Yes Used as received 1 grams reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3134 No Used as received Soxhlet 3149 Yes Further cut 1 g Soxhlet					
2948 1 1 1 1 2953 No Further cut 1g Water bath - 70°C 2955 Yes Used as received 0.6 2959 Yes Used as received 1g Mechanical Shaking 2960 Yes Used as received 2.5g Soxhlet 3110 # 21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene 3116 Yes Used as received 1 grams reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3134 No Used as received Soxhlet 3149 Yes Further cut 1 g Soxhlet				, -	пеацпд вюск
No Further cut 1g Water bath - 70°C 2955 Yes Used as received 0.6 2959 Yes Used as received 1g Mechanical Shaking 2960 Yes Used as received 2.5g Soxhlet 3110 # 21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene 3116 Yes Used as received 1 grams reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3134 No Used as received Soxhlet 3149 Yes Further cut 1 g Soxhlet				. —	
2955 Yes Used as received 1g Mechanical Shaking 2960 Yes Used as received 2.5g Soxhlet 3110 # 21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene 3116 Yes Used as received 1 grams reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3134 No Used as received Soxhlet 3149 Yes Further cut 1 g Soxhlet					Water bath - 70°C
2959 Yes Used as received 1g Mechanical Shaking 2960 Yes Used as received 2.5g Soxhlet 3110 # 21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene 3116 Yes Used as received 1 grams reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3134 No Used as received Soxhlet 3149 Yes Further cut 1 g Soxhlet					
3110 # 21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene 3116 Yes Used as received 1 grams reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3134 No Used as received Soxhlet 3149 Yes Further cut 1 g Soxhlet	2959			1g	
# 21550: Buffer extraction and reductive cleavage in water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene 3116 Yes Used as received 1 grams reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3134 No Used as received Soxhlet 3149 Yes Further cut 1 g Soxhlet				2.5g	
water bath, followed by liquid-liquid extraction using Diatomaceous Earth column. # 21551, extra xylene 3116 Yes Used as received 1 grams reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3134 No Used as received Soxhlet 3149 Yes Further cut 1 g Soxhlet	3110				
Diatomaceous Earth column. # 21551, extra xylene 3116 Yes Used as received 1 grams reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3134 No Used as received Soxhlet 3149 Yes Further cut 1 g Soxhlet					
3116 Yes Used as received 1 grams reflux before the buffer extraction. 3118 Yes Further cut 0.5 Reflux 3134 No Used as received Soxhlet 3149 Yes Further cut 1 g Soxhlet					
3118 Yes Further cut 0.5 Reflux 3134 No Used as received Soxhlet 3149 Yes Further cut 1 g Soxhlet	3116	Yes	Used as received	1 grams	
3149 Yes Further cut 1 g Soxhlet		Yes	Further cut		Reflux
· · · · · · · · · · · · · · · · · · ·					
5105 res Further cut 0.5g Heating water bath at 70°C					
	3153	res	ruriner cut	u.əg	nealing water bath at 70 C

lab	Laboratory accredited	Sample used as received or further grinded or cut	Sample intake in grams	Technique used to release/extract the analyte(s)
3154	Yes	Used as received		
3160	Yes	Further cut	0.7	Soxhlet
3172	Yes			
3176	Yes	Further cut	1	Water Bath
3182	Yes	Used as received	About 1 gram	Soxhlet
3185	Yes	Further cut	1g	
3190	Yes	Used as received	1g	SPE
3192				
3200	Yes	Used as received	Mechanical Shaking	
3209	Yes	Further cut	1g	
3210	Yes	Used as received	1g	Thermal Desorption
3214	Yes	Further cut	1 gram	Ultrasonic
3218	Yes	Used as received	0.5g	water bath
			-	Soxhlet extraction of dyes from polyester, heating bath
3222	Yes	Used as received	0,8 g	for extraction/reduction
3228	Yes	Used as received	3	heating block
				extraction with water bath and diatomaceous earth column for 20550 soxhlet and without diatomaceous
3237	Yes	Further cut	0,5 gr	earth column for 20551
3248	Yes	Further cut	0.5g	Soxhlet
8030	Yes	Further cut	1 g	

Analytical details continued

				ISO14362-1	Har of
		Extraction time	Extraction temperature	chapter 10.4 or Annex E	Use of diatomaceous
lab	Solvent used for release	in minutes	in °C	followed	earth column?
210					
	sodium dithionite, ethyl			_	
230	acetate	60	70	Annex E	No
339	EN14362-1	EN14362-1	EN14362-1	Annex E	No
	PE-S-930-LABE-006:		DE 0 000 / 1DE 000		
0.40	chlorobenzene, PE-S-930-		PE-S-930-LABE-006: reflux, PE-S-	D:(()	
348	LABE-005: citrate buffer sol	60 min, 30 min	930-LABE-005: 70±2°C	Different	
362	n-Hexane	40 min	70	Chapter 10.4	Yes
551	Xylene	40	70	Annex E	No
622	Xylene	40 min		Chapter 10.4	Yes
623	Xylene	40 min	1000	Annex E	No
840	xylene	40	<200	Annex E	No
841	15ml Citrate buffer	30 min	70°C	Annex E	No
2102	Xylene	40	Boiling	Different	V
2115 2129	#21551: Xylene	#21551: 60 min	#21551: 280°C	Chapter 10.4 Different	Yes
2129	#21551. Aylene #21550: Citric buffer	#21331.00111111	#21551. 260 C	Dillelelit	
2132	#21551: Citric buffer	30mins	70°C	Chapter 10.4	Yes
2132	Xylene	40 min	over Xylene boiling point	Chapter 10.4 Chapter 10.4	Yes
2139	Xylene	45 min	Boiling xylene	Annex E	No
2165	xylene	30 min	Boiling point	AIIIEX L	
2170	Xylene	@40 min	@100C	Chapter 10.4	Yes
2184	xylene	1 hr	Boiling point of xylene	Chapter 10.4 Chapter 10.4	Yes
2104	#21551 Colourant extraction	1 111	Boiling point of Ayleric	Onapici 10.4	103
	with Xylene	Reductive			
	#21550 Direct buffer	separation			
2201	extraction	30min+30min	70 degrees	Chapter 10.4	Yes
2213					
2218	Xylene	30	70	Chapter 10.4	Yes
	sodium dithionite in a citrate				
2232	buffer aqueous solution.	60min	70 degrees	Chapter 10.4	Yes
2236	·		G	·	
2238	t-butyl methyl ether	30min	70	Chapter 10.4	Yes
2247	Xylene	approx 30 min	>140°C	Chapter 10.4	Yes
2250	Methyl-tert. butylether	30	70	Chapter 10.4	Yes
2255	Xylene & t-BME	60	70	Chapter 10.4	Yes
	xylene extraction & citrate	40mins &			
2256	buffer	30mins	boiling & 70°C	Chapter 10.4	Yes
2258	MTBE,XILENE,METHANOL	60	70	Different	
	Sodium dithionite NaOH				
	Citrate/sodium hydoxide				
2265	MeOH TBME	2x 30min.	70°C	Chapter 10.4	Yes
2271	xylene	40min	boiling xylene	Chapter 10.4	Yes
		Until solvent			
2286	xylene	dripping from	Over 150°C	Chapter 10.4	Yes

l _e l.	Columntured for the second	Extraction time	Extraction temperature	ISO14362-1 chapter 10.4 or Annex E	Use of diatomaceous
lab	Solvent used for release	in minutes test piece	in °C	followed	earth column?
		becomes			
		colorless.			
2289 2290	Xylene	30min	70°C	Chapter 10.4	Yes
2290		50min for			
2291	#21551: xylene	#21551	/	Chapter 10.4	Yes
2293					
2295	TBME/dithionite	60	70	Chapter 10.4	Yes
2297	xylene Citric buffer & sodium	30min		Chapter 10.4	Yes
2301	dithionite	1 hour	70c	Chapter 10.4	Yes
2310	t-butylmethylether	50	70	Chapter 10.4	Yes
2311	Reduction by Sodium	30	70	Chapter 10.4	Yes
2313	Dithionite prepared in water Tertiary butyl methyl ether	60 min	70 degree	Chapter 10.4 Chapter 10.4	Yes
2314	TBME	75 MTS	70 DEC	Chapter 10.4	Yes
2320	Ethyl Acetate	15min	70°C	Annex E	No
2330	Xylene	30 min	70 °C	Annex E	No
2347 2350	Ethyl acetate Chlorobenzene	30min 30 min	70°C	Chapter 10.4	 Yes
2352	xylene	60min	<200°C	Chapter 10.4	Yes
2357	,				
2358	Xylene	40 min	N/A	Chapter 10.4	Yes
2364	MTBE	50min	below 45 °C	Chapter 10.4	Yes
2365 2366	Ethyl acetate buffer solution	15min 30	25 70	Annex E Chapter 10.4	No Yes
2367	methyl tert-Butyl Ether	<50 min	/	Chapter 10.4	Yes
2370	CAN	60 min	70 °C	Chapter 10.4	Yes
2372	Xylene	30	70	Chapter 10.4	Yes
2373	MTBE	50min	45°C	Chapter 10.4	Yes
2375 2378	Xylene Xylene	120 min 60min	70 °C 160 °C	Annex E Chapter 10.4	No Yes
2379	-	-	-	Annex E	No
2380	Xylene	40 Min	Less than 200°C	Annex E	No
2381				Annex E	No
2382	methanol ethylacetate dimethylbenlene	60min	70°C	Chapter 10.4	Yes
2386	MtBE and Xylol	2* 30min	70°C	Different	163
2390	ethyl acetate	15	70	Annex E	No
2406	Xylene	40 min	Reflux temp.	Annex E	No
2425	Methanol Citrate Buffer pH = 6,	2 hours	70° C	Annex E	No
2426	sodium dithionite, & t-BME	75 min	70+/-2C	Chapter 10.4	Yes
2429	T-butyl methyl ether	60	70	Annex E	No
2442	Xylene	40 min	(60 ± 2) °C		Yes
2449	Ethyl acetate	30 min	70	Annex E	No
2453 2456	Xylene isomers mixture	30 min	Reflux temp	Chapter 10.4 Chapter 10.4	Yes Yes
2459	Tertiary butyl methyl ether	60min	70	Chapter 10.4	Yes
	citrate buffer sol+aqueous			5p	
2472	sodium dithionite sol	30min	70	Chapter 10.4	Yes
2475 2476	TERT-Butyne methyl ether	40min	181	Chapter 10.4	Yes
2486	Tert- Butyl Methyl Ether	200 min	70°C	Chapter 10.4	Yes
2489	Tertiary butyl methyl ether	60 min	70°C	Chapter 10.4	Yes
2492	buffer pH 6.0	30 min	70 °C	Chapter 10.4	Yes
	D. 6	30min without ditionite sol and			
2495	Buffer citrate and ditionite sol	30min with diotionite sol	70°C	Chapter 10.4	Yes
2501	xylene	about 40 min	70°C	Chapter 10.4	Yes
2511	A y .ee	GD G G T T G T T T T T T T T T T T T T T		onapie. To	
2514	Xylene/TBME	60 min	70°C	Chapter 10.4	Yes
2523	Xylene (CAS No.: 1330-20-	#21550: >40 min ;#21551: 40 min	140°C	Chapter 10.4	Yes
2523 2528	7) xylene	,#21551. 40 min 30min	170 0	Chapter 10.4 Chapter 10.4	Yes
2534	Ethere	30+30 min	70°C	Chapter 10.4	Yes
2549	Xylene	30 min	Boiling temperature	Chapter 10.4	Yes
2553	MTBE	30 min	70 70 °C	Chapter 10.4	Yes
2560	Xylene	60 min xylene extraction	10 6	Annex E	No
		= 40 mins ph 6			
2561	xylene reflux	citrate buffer	citrate extraction = 70 oC	Annex E	No

				ISO14362-1 chapter 10.4 or	Use of
lab	Solvent used for release	Extraction time in minutes	Extraction temperature in °C	Annex E followed	diatomaceous earth column?
IdD	Solvent used for release	extraction = 60	III C	Ionoweu	earth columns
		mins total			
2565	Buffer solution	30 min	70°C	Chapter 10.4	Yes
2567	Buffer	30 min	70°C	Chapter 10.4	Yes
2569	xylene	2 hrs	70 °C		
2572 2582	Citric Buffer	30	70	Annex E	 No
2302		40 min soxhlet +	70	Alliex	NO
2590	Xylene + buffer citric acid/sodium hydroxide	60 min buffer extraction Reflux Extr:40	70°C	Different	
	Reflux Extraction: xylene Reduction of arylamines:	min Reduction of arylamines:30 +	Reflux Extraction 170 °C		
2591	buffer solution	30 min	Reduction of arylamines 70 °C	Chapter 10.4	Yes
2605	1	1	1	Chapter 10.4	Yes
2609	Chlorobenzene	30min	Reflux	Chapter 10.4	Yes
2618	Methyl tert-butyl ether	60 min	70 °C	Annex E	No
2638 2643	xylene Monoclorobenzene	30 min 20 min	above 100 C	Chapter 10.4	Yes Yes
2644	MTBE	30	70	Chapter 10.4 Chapter 10.4	Yes
2665	WIBE	00	70	Onapici 10.4	
2668	Xylene	30 min	70C	Chapter 10.4	Yes
2674	xylene	30min	70°C	Annex E	No
2678	Éthylacetate	30min+30min	70°C		
2689 2703	m-xylene	60mins	132°C	Annex E	No
2719 2734	Tert-Butyl Methyl Ether	N/A	N/A	Chapter 10.4	Yes
2741				Chapter 10.4	Yes
		40 min soxhlet extraction, 30 min buffer			
2743	TBME	heating.	70 °C	Chapter 10.4	Yes
2773	XYLINE	30 Minutes.	70°C	Chapter 10.4	Yes
2789	MTBE	30	70	Chapter 10.4	Yes
2798 2823	MTBE Xylene	15min 40 min	room temperature 225	Annex E Chapter 10.4	No Yes
2020	Citrate / Sodium hydroxide	40 111111	220	Onaptor 10.4	100
2826	sol	30 + /- 1 mins	70 + /- 2 oC	Chapter 10.4	Yes
2827	Xylene Extraction with boiling	40 mins	70°C	Chapter 10.4	Yes
2829	xylene	20 min	140 °C	Chapter 10.4	Yes
2864	Xylene	40	139 °C	Annex E	No
2866	•			Different	
2867	Xylene	60min	132°C	Chapter 10.4	Yes
2892	Xylenen/t-BME	30/30/30	70	Annex E	No
2948	Buffer+sodiumdithionite	30	60	Ch - mt - m 40 4	 \/
2953 2955	Citric acid buffer Xylene & t-BME	60min 60	70°C 70	Chapter 10.4 Chapter 10.4	Yes Yes
2959	MTBE	15	70	Chapter 10.4 Chapter 10.4	Yes
2960	xylene	40min	70°C	Chapter 10.4	Yes
3110	,				
3116	Buffer followed by MBTE	30 min 40 min or until solvent drops from the	70°C	Chapter 10.4	Yes
3118	xylene	specimen are colourless	boiling temperature of	Chapter 10.4	Yes
3134 3149	Chloroform and xylene Xylol	approx 90 min 40 min	dichlromethane and xylene	Chapter 10.4 Chapter 10.4	Yes Yes
	Citrata / Cadium kudunuid	30 min plus 30			
3153 3154	Citrate / Sodium hydroxide buffer solution	min after adding reducing agent	70°C	Chapter 10.4	Yes
3160 3172	xilene and chlorobenzene	40	Not controlled	Chapter 10.4	Yes
0.4=0	Citric Acid, Sodium Hydroxide, Sodium	00	70	01-1-10-1	V
3176	Dithionite	60	70	Chapter 10.4	Yes
3182	Xylene	40 min	70°C	Chapter 10.4	Yes
3185 3190		\	\ 	Chapter 10.4	Yes Yes
3190	′	1	′	Chapter 10.4	res
3200				Chapter 10.4	Yes

lab	Solvent used for release	Extraction time in minutes	Extraction temperature in °C	ISO14362-1 chapter 10.4 or Annex E followed	Use of diatomaceous earth column?
3209	ISO 14362-1:2017	60min	70°C	Chapter 10.4	Yes
3210	tampon pH 7 Citrate / Sodium Hydroxide	60 min	70°C	Chapter 10.4	Yes
3214	buffer sol Citrate/sodium hydroxide	30 mins	70	Chapter 10.4	Yes
3218	buffer sol xylene for extraction of dyes from polyester, then	60min	70°C	Chapter 10.4	Yes
	extraction/reduction with buffer solution pH 6 and	30 min xylene extr, 60 min			
3222	sodium hydrosulphite	extr/reduction	70°C	Chapter 10.4	Yes
3228	m-xylene	60	130	Chapter 10.4	Yes #21550: Yes;
3237	buffer strat	60 min	70	Chapter 10.4	#21551: No
3248	Xylene	30 min	NA	Chapter 10.4	Yes
8030	-	-	-	Chapter 10.4	Yes

APPENDIX 4

Number of participants per country

- 10 labs in BANGLADESH
 - 1 lab in BRAZIL
 - 1 lab in BULGARIA
- 2 labs in CAMBODIA
- 1 lab in EGYPT
- 3 labs in FRANCE
- 9 labs in GERMANY
- 1 lab in GREECE
- 2 labs in GUATEMALA
- 11 labs in HONG KONG
- 12 labs in INDIA
- 4 labs in INDONESIA
- 12 labs in ITALY
- 2 labs in JAPAN
- 1 lab in MAURITIUS
- 1 lab in MOROCCO
- 36 labs in P.R. of CHINA
- 6 labs in PAKISTAN
- 1 lab in PORTUGAL
- 2 labs in SINGAPORE
- 4 labs in SOUTH KOREA
- 4 labs in SPAIN
- 3 labs in SRI LANKA
- 5 labs in TAIWAN
- 3 labs in THAILAND
- 1 lab in THE NETHERLANDS
- 2 labs in TUNISIA
- 4 labs in TURKEY
- 1 lab in U.S.A.
- 3 labs in UNITED KINGDOM
- 7 labs in VIETNAM

APPENDIX 5

Abbreviations

C = final test result after checking of first reported suspect test result

 $\begin{array}{ll} D(0.01) &= \text{outlier in Dixon's outlier test} \\ D(0.05) &= \text{straggler in Dixon's outlier test} \\ G(0.01) &= \text{outlier in Grubbs' outlier test} \\ G(0.05) &= \text{straggler in Grubbs' outlier test} \\ DG(0.01) &= \text{outlier in Double Grubbs' outlier test} \\ DG(0.05) &= \text{straggler in Double Grubbs' outlier test} \\ \end{array}$

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
SDS = Safety Data Sheet

Literature

- iis Interlaboratory Studies, Protocol for the Organisation, Statistics & Evaluation, June 2018
- 2 ISO5725:86
- 3 ISO5725 parts 1-6:94
- 4 ISO13528:05
- 5 M. Thompson and R. Wood, J. AOAC Int, <u>76</u>, 926, (1993)
- 6 W.J. Youden and E.H. Steiner, Statistical Manual of the AOAC, (1975)
- 7 P.L. Davies, Fr. Z. Anal. Chem, <u>331</u>, 513, (1988)
- 8 J.N. Miller, Analyst, <u>118</u>, 455, (1993)
- 9 Analytical Methods Committee, Technical Brief, No 4, January 2001
- 10 P.J. Lowthian and M. Thompson, The Royal Society of Chemistry, Analyst, <u>127</u>, 1359-1364 (2002)
- 11 W. Horwitz and R. Albert, J. AOAC Int, <u>79</u>, <u>3</u>, 589-621, (1996)
- Bernard Rosner, Percentage Points for a Generalized ESD Many-Outlier Procedure, Technometrics, 25(2), 165-172, (1983)